MILCOR MANUAL

FIREPROOF BUILDING PRODUCTS

METAL LATH AND ACCESSORIES

THE COMPANY

The Inland Steel Products Company is the foremost national manufacturer of "Firesafe" sheet metal products, largely consumed by the building industry. Constant improvement in design, materials, workmanship, and methods of production has marked the company's progress, until today Milcor Products are accepted nationally as standards of quality.

DIVERSIFIED LINE OF PRODUCTS

In addition to the line of Metal Lath, Plastering Accessories and Metal Trim, including Casings, Stools, Metal Bases, etc., described in this catalog, the Inland Steel Products Company is among the largest manufacturers making a complete line of metal building products.

MANUFACTURING AND DISTRIBUTING FACILITIES

The Inland Steel Products Company's plants consist of over a million (1,000,000) square feet of floor space and its properties cover forty (40) acres of land.

In addition to its main plants in Milwaukee 1, Wisconsin, and Cleveland 14, Ohio, equipped with modern machines, there are branches in Chicago 9, Illinois; Kansas City 8, Missouri; Detroit 2, Michigan; Buffalo 11, New York; Cincinnati 25, Ohio; Rochester 9, New York; Los Angeles 23, Calif.; Baltimore 24, Maryland; and St. Louis 10, Mo. Sales offices are maintained in other principal centers.

CATALOGS AVAILABLE

(Size 8½x11 inches to fit filing cabinet.)

No. 101 Milcor Metal Trim

No. 200 The Milcor Manual (Metal Lath and Allied Products)

No. 302 Milcor Steel Roofing and Roofing Accessories

No. 402 Milcor Furnace Pipe and Fittings.

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MILCOR PRODUCTS—SPECIAL FEATURES

EXPANSION WING FEATURE

One of the outstanding features of Milcor Lathing Accessories, is the expanded metal lath wing which forms an integral part of the corner bead, base screed, metal casing, and other products. The wings of various widths are formed of ⅜-inch diamond mesh expanded metal lath.

The advantages over the older types of plastering accessories are apparent:

(1) The network of the expanded metal wings assures keying of the plaster close up to the base of the exposed metal member.

(2) There is a definite economy in labor due to the simplicity of erection—these products can be wired, stapled, nailed or spotted, as best adapted to the particular type of wall construction, without the use of clips.

Painting—All black metal lath is painted after cutting and expansion with Special Elastic Asphaltum Paint.

Galvanizing—All galvanized sheets are tight coated with new, pure zinc spelter before cutting and expansion.

Sheet Steel—Products so specified are cut from the highest grade of carefully inspected prime open-hearth sheet steel, either painted or galvanized as noted.

Copper Alloy Steel—The peculiar ability of copper alloy steel to resist corrosion is well known. Milcor "Copper Alloy" is of standard quality, carefully controlled for uniformity in production.

Products are furnished in Copper Alloy Steel painted or galvanized steel as noted.

LABELS

Every bundle of Milcor Lath is conspicuously labeled with a distinctive metal tag vouching clearly for weight and particular metal used. Thus verification of specification requirements is easily insured.

MILWAUKEE 1, WISCONSIN

CLEVELAND 14, OHIO · CHICAGO 9, ILL. · BALTIMORE 24, MD. · KANSAS CITY 8, MO. · LOS ANGELES 23, CALIF. · ROCHESTER 9, N. Y.
DETROIT 2, MICH. · BUFFALO 11, N. Y. · CINCINNATI 25, OHIO · ST. LOUIS 10, MO.

Send Inquiries to INLAND STEEL PRODUCTS COMPANY (Formerly Milcor Steel Co.)
P. O. Box 393, Milwaukee 1, Wis.

MILCOR SPECIALMESH

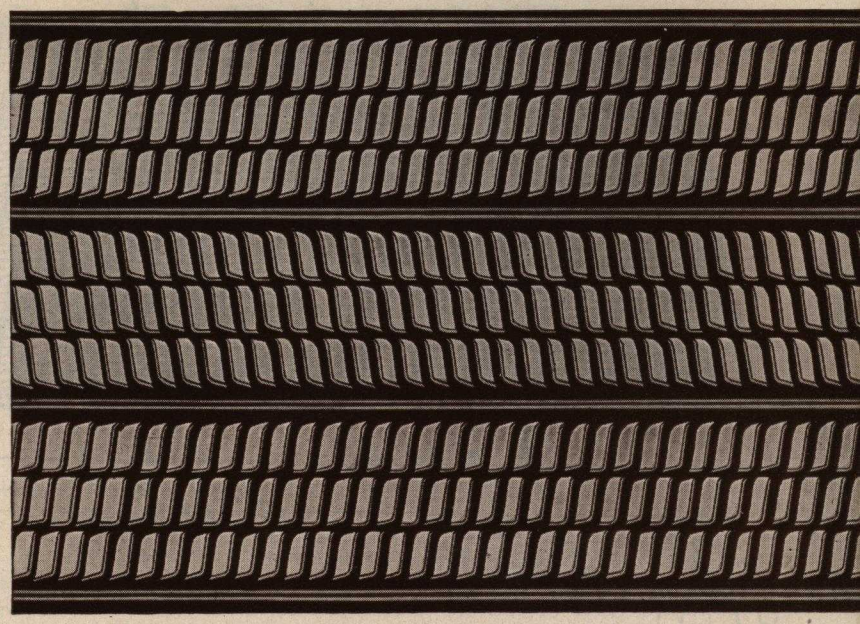
Milcor Specialmesh is a rib lath specially adapted for interior walls and ceilings. The meshes are so formed that in plastering the slightest pressure of the trowel completely imbeds the lath, and due to the small mesh, waste of plaster is eliminated. The longitudinal stiffening ribs are ⅜ inch wide, spaced 1⅝ inches on center and are connected at ¼-inch intervals by strands. These strands, in turn, are strongly reinforced at their junctures by stiffening members (two between each pair of ribs). All sheets are squared on both ends.

SHEET SIZE

24x96 in., packed 9 sheets (16 sq. yds.) per bundle.
27x96 in., packed 10 sheets (20 sq. yds.) per bundle.

MATERIALS AND WEIGHTS (lbs. per sq. yd.)

COPPER ALLOY STEEL, PAINTED—2.75, 3.40.



MILCOR SPECIALMESH METAL LATH

STAY-RIB NO. 1

No. 1 Stay-Rib Lath is ideally adapted for interior plaster.

It is designated for maximum rigidity and, due to its added metal surface, unusual economy of material—an adequate key, however, is assured. The longitudinal stiffening ribs are ½ inch wide, spaced 1¾ inches on center interconnected at ¼-inch intervals by strands. These, in turn, are strongly reinforced at their centers by a stiffening member.

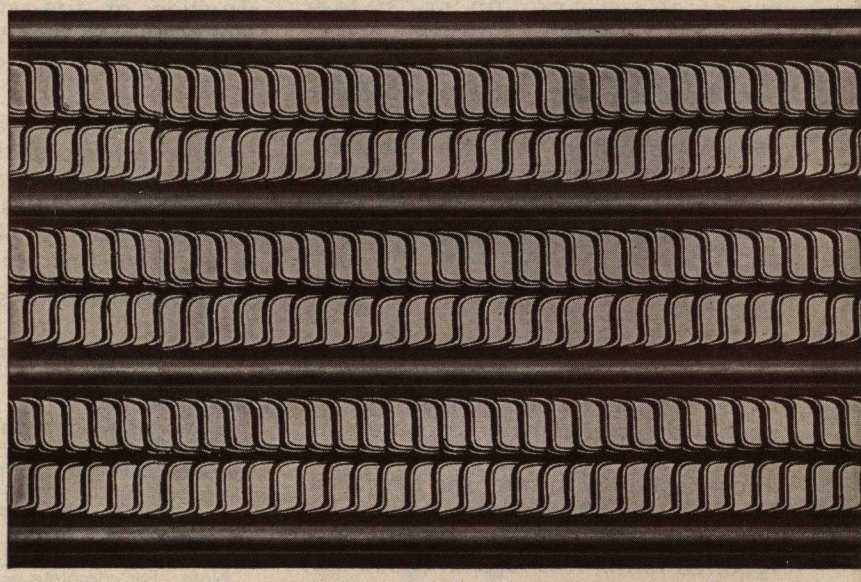
Fewer supporting runner channels and less labor are required because the spacing can be made much wider without impairing safety.

SHEET SIZE

24x96 in., packed 9 sheets (16 sq. yds.) per bundle.

MATERIALS AND WEIGHTS (lbs. per sq. yd.)

COPPER ALLOY STEEL, PAINTED—2.75, 3.40.



STAY-RIB METAL LATH NO.1

STAY-RIB NO. 2

No. 2 Stay-Rib has ⅜-inch heavy longitudinal ribs spaced 4.8 inches on center with five stiffening members between ribs forming adequate reinforcement for the connecting strands spaced at ¼-inch intervals.

It is ideal for all purposes where a self-furring lath is required for wide spans on ceilings and for floor reinforcing over steel joists.

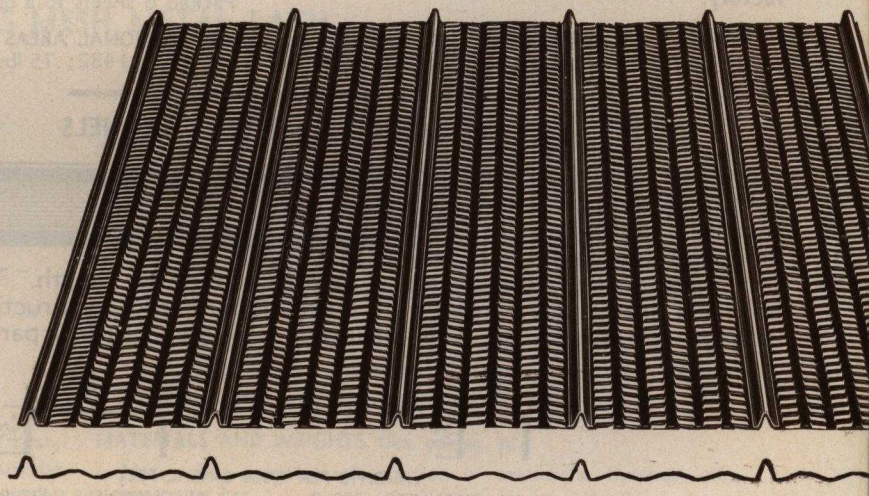
Due to the strength and rigidity of the ribs, this lath effects very definite economies in both labor and material on furred or suspended ceilings where wide spacing of supporting cross channels is possible.

SHEET SIZE

24x96 in., packed 9 sheets (16 sq. yds.) per bundle.

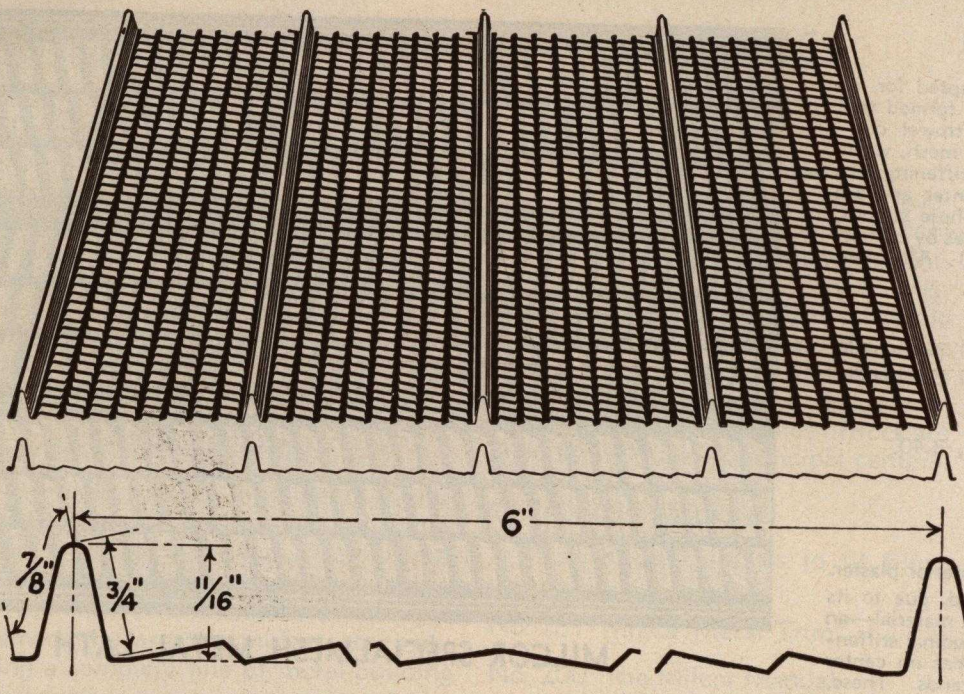
MATERIALS AND WEIGHTS (lbs. per sq. yd.)

COPPER ALLOY STEEL, PAINTED—3.40, 4.00.



STAY-RIB METAL LATH NO. 2

WEIGHTS FOR MAXIMUM SPACING OF SUPPORTS				
Weights recommended (lbs. per sq. yd.)	Distance Between Supports			
	Walls		Ceilings	
	Nailed on, in.	Tied on, in.	Nailed on, in.	Tied on, in.
MILCOR SPECIALMESH				
2.75	16	16	16	12
3.4	19	19	19	19
STAY-RIB NO. 1				
2.75	16	16	16	12
3.4	19	19	19	19
STAY-RIB NO. 2				
3.4	24	24	24	24
4.0	24	24	24	24



3/4" STAY-RIB METAL LATH NO. 3

No. 3 (¾ inch) Stay-Rib has ¾-inch heavy longitudinal ribs spaced 6 inches on center, with seven stiffening members between ribs, forming adequate reinforcement for the connecting strands spaced at ¼-inch intervals. The Milcor process of forming the heavy ribs is important. They are cold-drawn—not stamped—straight, true and uniform in shape with the sides of the rib sloped to insure maximum rigidity.

This lath is designed primarily as reinforcement for concrete floors and roofs, serving in addition as a form upon which wet concrete is poured. In this capacity it is most extensively used in connection with steel and bar joists. The lath may also be used in solid slab construction and may be curved to any required form. It is recommended that wherever curved sheets are required, the curving be accurately done **at the factory.**

Besides its adaptability for flat roof reinforcing, it is unexcelled in the construction of fire-safe pitched roofs, saw-tooth and monitor-type roofs and their adjoining wall or gable constructions.

No. 3 Stay-Rib is admirably adapted to the construction of solid plaster partitions where, due to the rigidity and reinforcing qualities of the ribs, no studs are required—the lath spans vertically from floor to ceiling.

Laid over wood joists, it is ideal as reinforcing for the concrete base for tile, terrazzo or composition flooring.

SHEET SIZE

The covering width of each sheet is 24 inches. **Standard sheets are 6, 7, 8, 9, 10, 11 and 12 feet long.** Sheets of intermediate length can be furnished, cut to exact lengths without extra cost (except that of stock waste).

MATERIALS AND WEIGHTS (lbs. per sq. ft.)

Note: For complete descriptions of materials, finishes, etc., see page 2.

COPPER ALLOY STEEL, PAINTED—.60, .75.

Packed 6 sheets to a bundle.

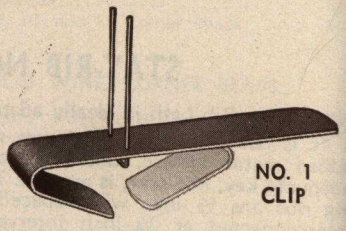
CROSS SECTIONAL AREAS (sq. in. per ft. width)

.60 lbs.—.1482; .75 lbs.—.1977.

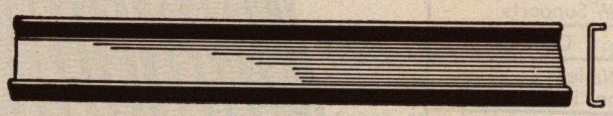
NO. 1 MILCOR METAL LATH CLIPS

For attaching Nos. 2 and 3 Stay-Rib Metal Lath when used as top lath in floor or roof construction (see page 3).

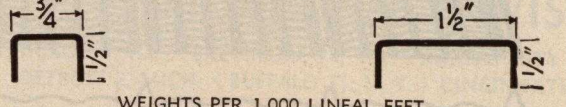
Milcor Lath Clip No. 1 is made in two parts: A flat metal strip and a strong "U" shaped tie wire. One end of the strap is formed into a hook shape at the factory, the other end is clinched around the flange of the beam on the job.



MILCOR COLD ROLLED CHANNELS



Milcor Steel Channels are cold rolled and present a level surface on all three sides. They are accurately pressed at perfect right angles, uniform and straight their entire length. These cold rolled channels are regularly used with metal lath in the construction of suspended ceilings, furred ceilings, wall furring and solid and hollow partitions.



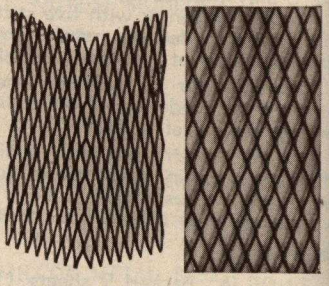
WEIGHTS PER 1,000 LINEAL FEET

¾-IN. CHANNELS—300 lbs. 1½-IN. CHANNELS—475 lbs.

Furnished in 16 and 20-ft. lengths

MILCOR Diamond-Mesh Expanded Corner Lath

(FOR INNER CORNERS AND CEILING ANGLES)



CORNER LATH LATH STRIP

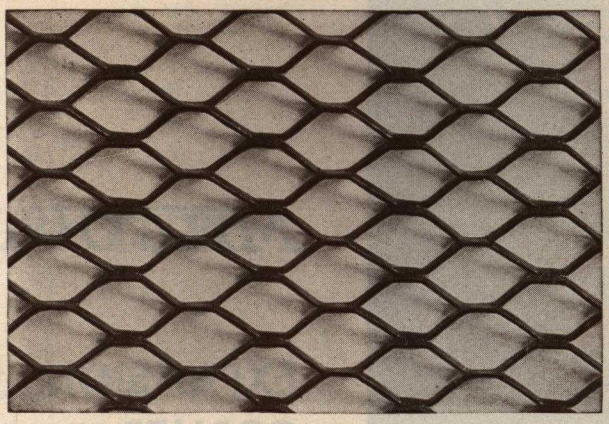
SPECIFICATION DATA

General Characteristics

Milcor Corner Lath consists of strips of Netmesh (see page 5) ⅜-in. diamond expanded lath with finished edges — not rough or ragged. Required as reinforcing over all re-entrant angles over wood or rib metal lath or over plaster board.

SIZES—Corner Lath has 2 or 3-in. wing width and is 8 ft. long. Lath Strips are 3 ins. wide and 8 ft. long. Packed 600 lin. ft. per bundle.

MATERIAL—Painted copper alloy steel.



SMALMESH

Due to the close, rigid mesh only a comparatively small amount of plaster is required to produce a perfect key with speed, ease and economy in plastering material.

A general utility lath ideally suited to the ordinary lathing need. It can be readily bent or formed for furred or ornamental members and for fireproofing of steel beams, girders, and columns.

SHEET SIZE

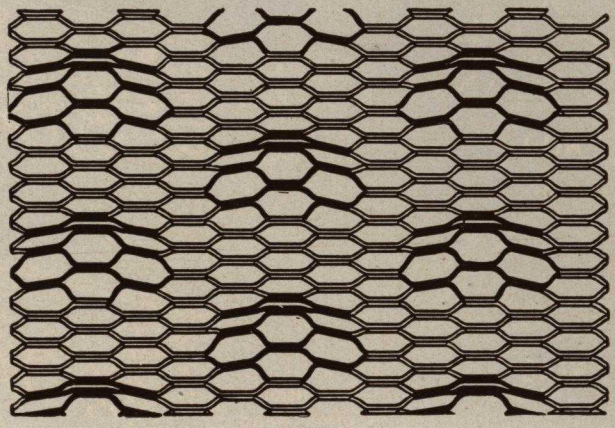
24x96 in., packed 9 sheets (16 sq. yds.) per bundle.
27x96 in., packed 10 sheets (20 sq. yds.) per bundle.
All sheets are squared on both ends.

MATERIALS AND WEIGHTS (lbs. per sq. yd.)

Note: For complete descriptions of materials, finishes, etc., see page 2.

COPPER ALLOY STEEL, PAINTED—2.50, 3.40.
GALVANIZED SHEET STEEL—3.40

RECOMMENDED WEIGHTS (lbs. per sq. yd.)				
Recommended weights	Distance Between Supports			
	Walls		Ceilings	
	Nailed on, in.	Tied on, in.	Nailed on, in.	Tied on, in.
2.5	16	12	....	....
3.4	16	16	16	13½



FURLATH

Furlath is a diamond expanded self-furring lath designed for exterior stucco.

The self-furring feature consists of staggered indentations or stools spaced 3½ inches apart horizontally and 2 inches apart vertically, which hold the body of the lath ⅜ of an inch away from the sheathing or wall.

The lath should be secured to the sheathing at depressions or indentations with six-penny nails or 1¼-inch roofing nails.

SHEET SIZE

24x96 in., packed 9 sheets (16 sq. yds.) per bundle.
27x96 in., packed 10 sheets (20 sq. yds.) per bundle.
All sheets are squared on both ends.

MATERIALS AND WEIGHTS (lbs. per sq. yd.)

Note: For complete description of materials, finishes, etc., see page 2.

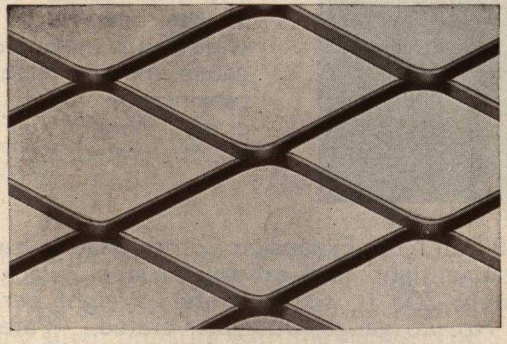
COPPER ALLOY STEEL, PAINTED—2.50, 3.40.
GALVANIZED SHEET STEEL—3.40

RECOMMENDED WEIGHTS (lbs. per sq. yd.)

OVER SHEATHING, ETC.—3.40.

● ● ●

MILCOR BIG MESH METAL LATH



Success with stucco requires not only a correct plastering base, but proper reinforcement as well. This reinforcement must be such that the plastering operation will easily and effectively make it an integral part of the stucco slab.

With these requirements in mind Milcor Big-Mesh Stucco Lath has been designed essentially for stucco work applied either by hand or "gunite" machine. It is expanded into diamond meshes 1½x3 in. with heavy connecting strands.

Since reinforcement is the essential feature, furring is necessary. This is accomplished economically by the Milcor Furring Nail, 1½ in. long, equipped with a spacing device held close up into the mesh angles, placing the wings so that the conveying strands rest on its top edge, ⅜ of an inch out from the sheathing.

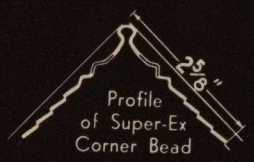
SHEET SIZE

48 x 96 in., packed 10 sheets (35 5/9 sq. yds.) per bundle.
All sheets are squared on both ends.

MATERIALS AND WEIGHTS (lbs. per sq. yd.)

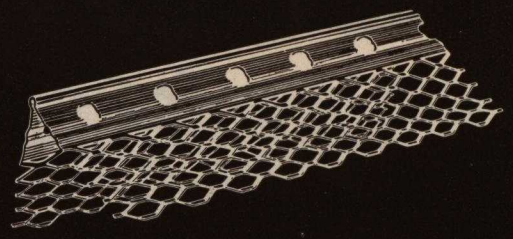
Note: For complete description of materials, finishes, etc., see page 2.
COPPER ALLOY STEEL, PAINTED—1.8, 3.6.

SUPER-EX

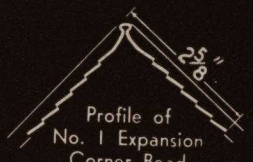


Profile of Super-Ex Corner Bead

Super-Ex Corner Bead Pat. No. 2,267,002

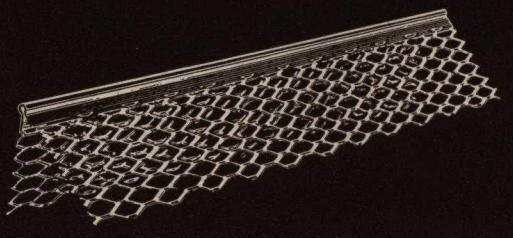


NO.1

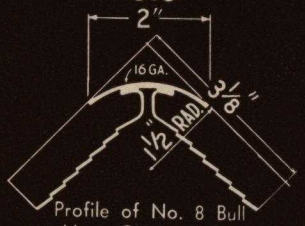


Profile of No. 1 Expansion Corner Bead

No.1 Expansion Corner Bead

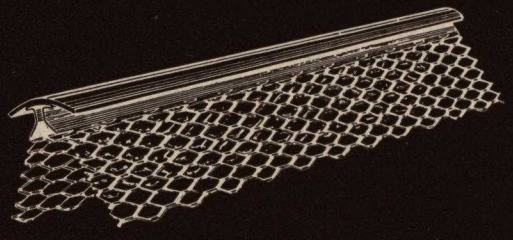


NO.8

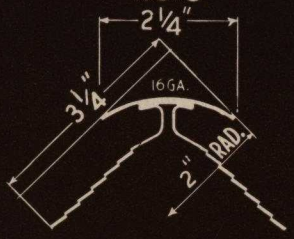


Profile of No. 8 Bull Nose Corner Bead

No. 8 Expansion Bull Nose Corner Bead

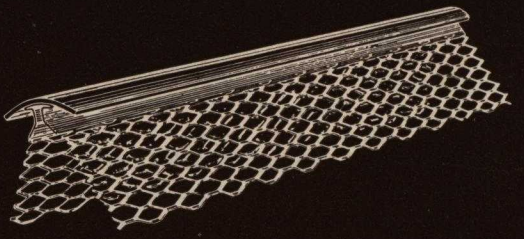


NO.9

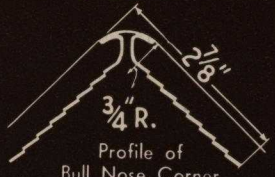


Profile of No. 9 Bull Nose Corner Bead

No. 9 Expansion Bull Nose Corner Bead

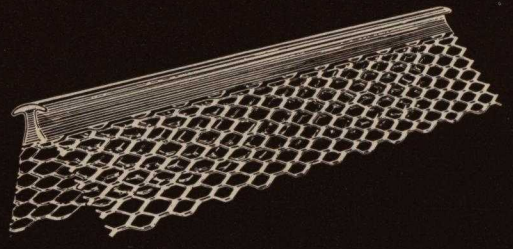


NO.10

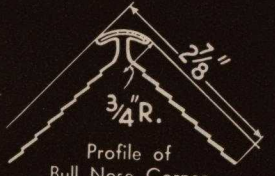


Profile of Bull Nose Corner Bead No. 10

No. 10 Expansion Bull Nose Corner Bead

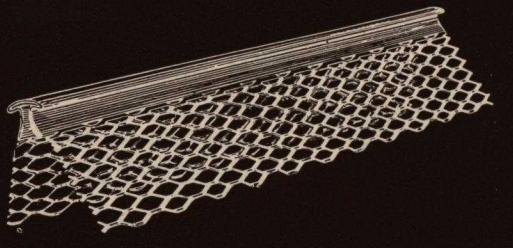


NO.11



Profile of Bull Nose Corner Bead No. 11 Showing Reinforcement

No. 11 Expansion Bull Nose Corner Bead



MILCOR

EXPANSION CORNER BEADS

Super-Ex Corner Bead combines all the advantages of both Expansion and Solid Wing Corner Beads. Absolutely rigid—excellent plaster bond. Made of Galvanized Sheets, 26 gauge. Made in 8, 9, 10 and 12-ft. lengths. Weight per 1000 feet: No. 26 gauge, 320 lbs., crated. Crated in approximately 500 feet lots.

No. 1 Expansion Corner Bead has a 2⅝-inch expanded metal wing which is integral with the nose of the bead. Fabricated from No. 26 gauge tight coat galvanized steel. Made in 8, 9, 10 and 12-ft. lengths. Weight per 1,000 feet: No. 26 gauge, 230 lbs., crated. Packed approximately 500 feet to the crate.

No. 8 Bull Nose Expansion Corner Bead has a 1½-inch radius. The face of the bead is 2 inches wide and is made from 16-gauge metal. Packed approximately 200 ft. to the crate. Weight per 1,000 lin. ft., crated, 850 lbs.

No. 9 Bull Nose Expansion Corner Bead has a 2-inch radius. The face of the bead is 2¼ inches and is made from 16-gauge metal. Packed approximately 20 Pcs. to the crate. Weight per 1,000 lin. ft., crated, 1,050 lbs.

No. 10 Bull Nose Expansion Corner Bead is furnished in 26-gauge tight coat galvanized steel. Packed approximately 200 ft. to the crate. Weight per 1,000 lin. ft., No. 26 gauge, 365 lbs., crated. (Patent No. 1,678,813.)

No. 11 Bull Nose Expansion Corner Bead is the same as No. 10 except that it has reinforced nose. Weight per 1,000 ft., 465 lbs., crated.

Corner Beads Nos. 8, 9, 10 and 11 made in 7, 8, 9, 10 and 12-foot lengths

MILCOR

SOLID WING CORNER BEADS

NO. 12 EXTRA WIDE FLANGE CORNER BEAD

MATERIAL—No. 26 gauge sheet steel, galvanized.

LENGTHS—8, 9, 10 and 12 ft.

APPROXIMATE WEIGHT—No. 26 gauge—370 lbs. per 1,000 ft.

NO. 13 "SUPERIOR" CORNER BEAD

MATERIAL—No. 26 gauge sheet steel, galvanized.

LENGTHS—8, 9, 10 and 12 ft.

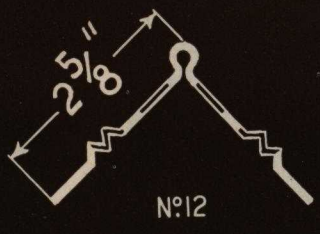
APPROXIMATE WEIGHT—220 lbs. per 1,000 ft., crated. Packed ten pieces of uniform length to the bundle.

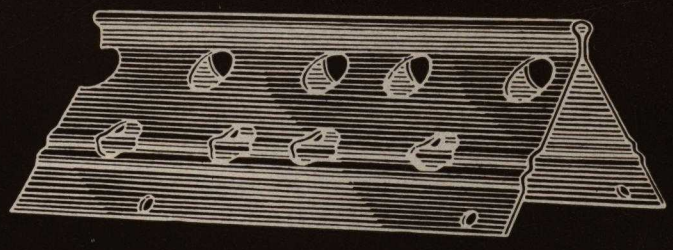
NO. 15 "MILCOR" CORNER BEAD

MATERIAL—No. 26 gauge sheet steel, galvanized.

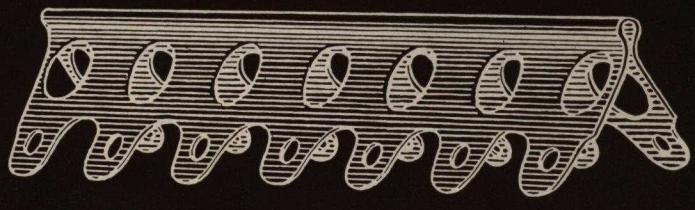
LENGTHS—8, 9, 10 and 12 ft.

APPROXIMATE WEIGHT—200 lbs. per 1,000 ft.

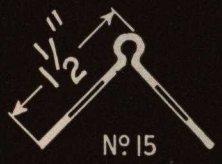


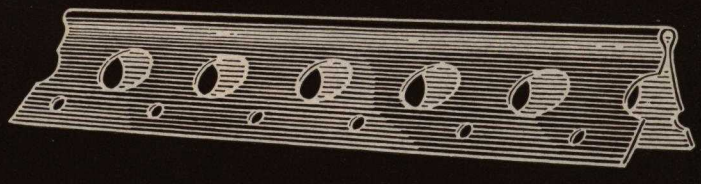


NO. 12. EXTRA WIDE FLANGE CORNER BEAD



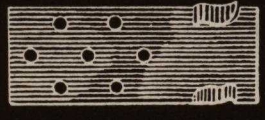
NO. 13. "SUPERIOR" CORNER BEAD





NO. 15. "MILCOR" CORNER BEAD

MILCOR
ARCH BEAD



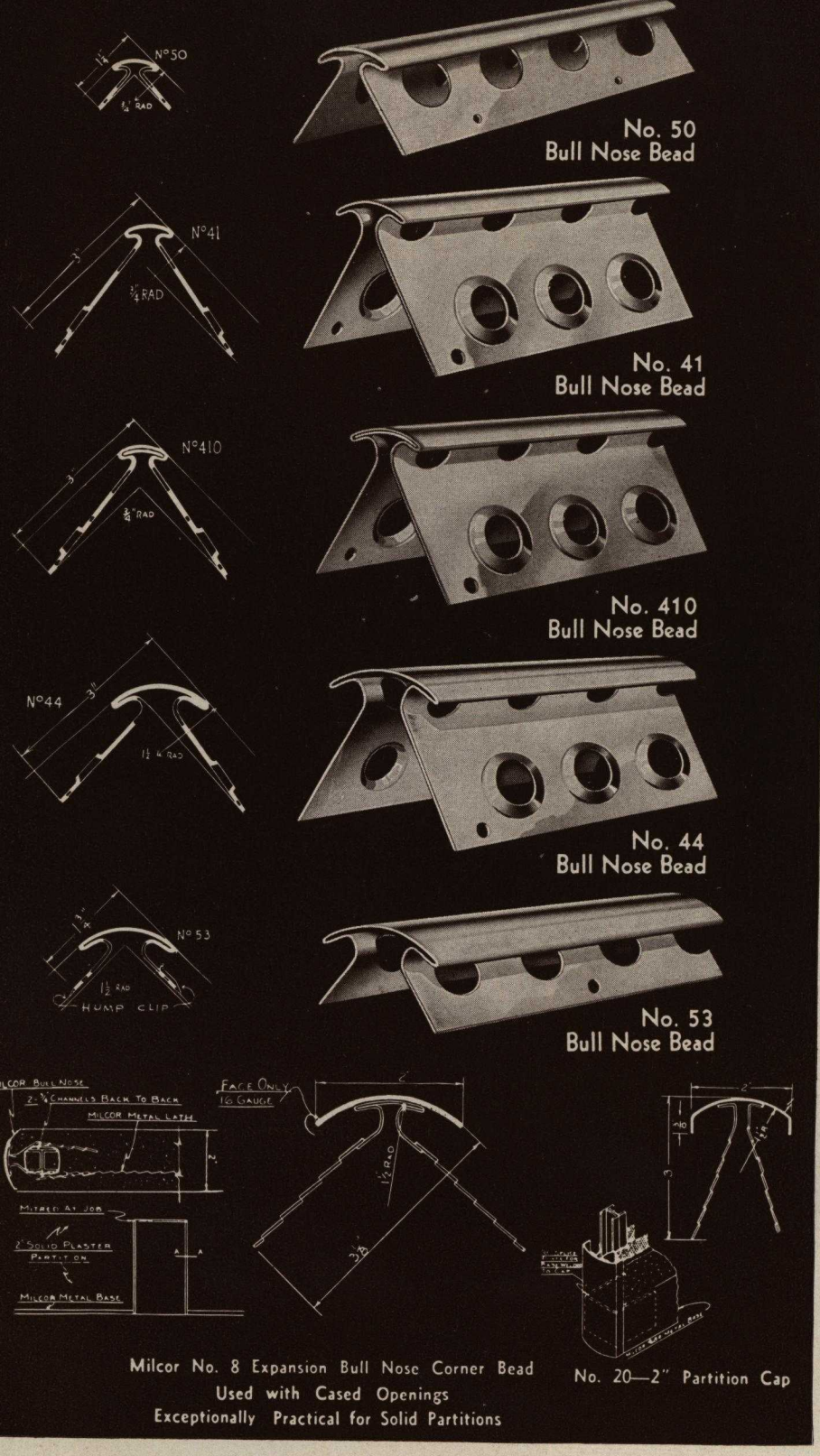
Corner Bead Clip

MILCOR ARCH BEAD

THIS CORNER BEAD is used straight or curved. To curve—simply snip one or both flanges with tin snips. The desired arc can then be formed by applying slight pressure with the hands. The special design of the bead allows it to be formed into a smooth arc without kinks or breaks in the nose. A minimum amount of metal cutting is required.

Made of 26 gauge galvanized sheet steel in 8, 9, 10 and 12-ft. lengths.
Weight per 1,000 lin. ft.—180 lbs.

All corner beads on this page are packed as follows: 8 ft.—560 ft. per carton, 9 ft.—540 ft. per carton, 10 ft.—500 ft. per carton, 12 ft.—600 ft. per carton



Diagrams above indicate how the Milcor No. 8 Expansion Bull Nose Corner Bead and the No. 20 Partition Cap are used in connection with cased openings in Solid Partitions.

All Corner Beads on this page made in 7, 8, 9, 10 and 12-foot lengths.

MILCOR SOLID WING BULL NOSE CORNER BEADS

NO. 50 BULL NOSE BEAD

¾-in. radius.

MATERIAL—No. 26 and No. 24 gauge sheet steel.

APPROXIMATE WEIGHTS—No. 26 gauge, 290 lbs. per 1,000 feet, crated; No. 24 gauge, 410 lbs. per 1,000 feet, crated. Packed approximately 500 lin. ft. per crate.

NO. 41 BULL NOSE BEAD

¾-in. radius, 3-in. flange. Cone-shaped perforations form a perfect key.

MATERIAL—No. 26 gauge sheet steel.

APPROXIMATE WEIGHTS—No. 26 gauge, 480 lbs. per 1,000 feet, crated. Packed approximately 500 lin. ft. per crate.

NO. 410 REINFORCED BULL NOSE BEAD

¾-in. radius, 3-in. flange. Cone-shaped perforations form a perfect key.

MATERIAL—No. 26 gauge sheet steel with 20 gauge reinforced nose.

APPROXIMATE WEIGHTS—No. 26 gauge, 500 lbs. per 1,000 feet, crated. Packed approximately 500 lin. ft. per crate.

NO. 44 BULL NOSE BEAD

1½-in. radius, 3-in. flange. Cone shaped perforations form a perfect key.

MATERIAL—No. 26 gauge sheet steel.

APPROXIMATE WEIGHTS—No. 26 gauge, 570 lbs. per 1,000 feet, crated. Packed approximately 500 lin. ft. per crate.

NO. 440 BULL NOSE BEAD

Same as No. 44 except that it has reinforced nose.

NO. 53 BULL NOSE BEAD

1½-in. radius, 1¾-in. flange.

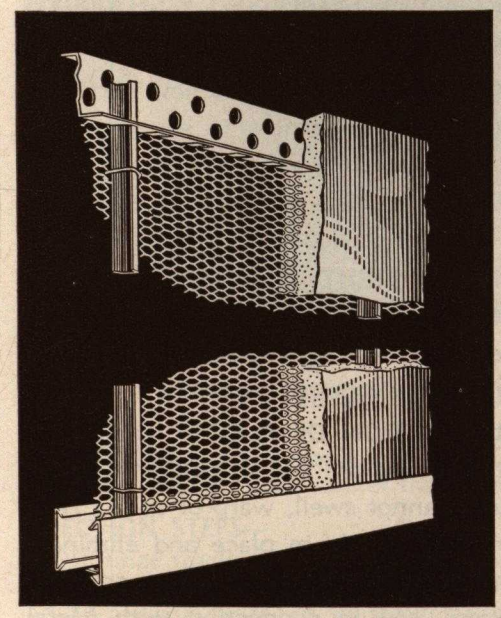
MATERIAL—No. 26 gauge sheet steel.

APPROXIMATE WEIGHTS—No. 26 gauge, 390 lbs. per 1,000 feet, crated. Packed approximately 500 lin. ft. per crate.

NO. 530 BULL NOSE BEAD

Same as No. 53 except that it has reinforced nose.

MILCOR SOLID PARTITION SYSTEM



The Milcor Solid Partition is a steel reinforced vertical slab of plaster, 2 inches thick. Hot or Cold Rolled Steel Channels, running from floor to ceiling, reinforce the partition vertically and hold the Metal Lath to which the plaster is applied. The Metal Lath reinforces the partition both horizontally and diagonally and at the same time functions as a plaster base. The Milcor Solid Partition works as a unit to resist physical impact, fire, wind, water, sound and vibration.

DESCRIPTION

The new Milcor Solid Partition System utilizes standard ¾-in. Hot or Cold Rolled Channels in combination with Ceiling Runner and Floor Runner or in combination with Ceiling Runner, Floor Clips and Metal Base. Erection is swift and simple. Ceiling Runner and Floor Runner or Clips are attached with stub nails, anchor bolts or Rawl Drives. Channel Studs are then inserted into Ceiling Runner and Floor Runner or Clips, which hold them securely in position. When Metal Lath is applied (on Runner side of partition—see illustration), tying is completed in one operation with ordinary tie wire without any previous wiring of Channels to Runners. Tying is done at intervals not to exceed nine inches vertically. Partition is completed by plastering on both sides of the Metal Lath to a total thickness of two inches.

Channels furnished in stock lengths and cut to length on the job. Runners furnished in 24- or 26-ga. steel in stock lengths of 10 feet with openings for studs spaced 2-in. on centers. Depth of Ceiling Runner allows for 2-in. variation in ceiling heights.

METAL BASES

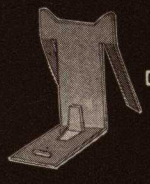
Metal Bases, illustrated below, act as plaster grounds and eliminate need for Base Screed. The prongs on the Floor Clips are bent up so that Base can be hung temporarily until all adjustments have been completed. Base is then secured by bending the prongs down into position. Bases shown are made of 18- and 20-ga. steel in 10-ft. lengths. Notching, cutting and bending tools for forming corners at the job can be furnished on a rental basis.

MILCOR FURRING SYSTEM

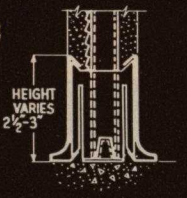
This construction permits the use of a free standing wall, plastered one side only, which can be placed at any distance from the masonry walls. The space between lath wall and masonry wall may be filled with insulating material or may be used for concealing pipes and conduits. Method of erection is the same as for Solid Partitions except that plastering is done on one side only.

FLOOR CLIPS AND METAL BASES FOR USE WITH MILCOR SOLID PARTITION AND FURRING SYSTEM

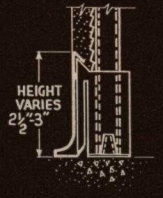
Clips for Metal Bases Nos. 665, 666 and 668



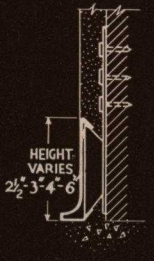
"D" Clip Double Base Type



Solid Plaster Partition

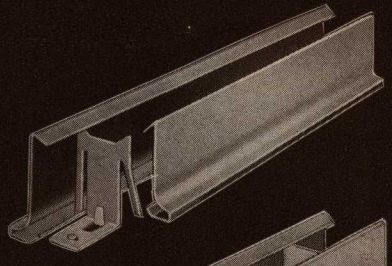


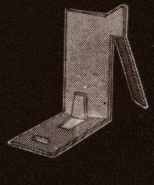
Furred Wall



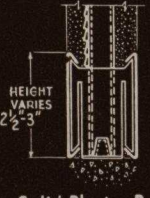
Masonry Wall

No. 665 Metal Base

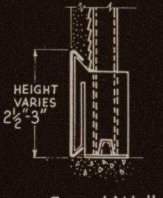




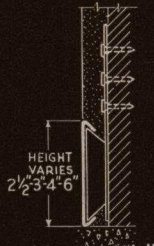
"F" Clip Furring Type



Solid Plaster Partition

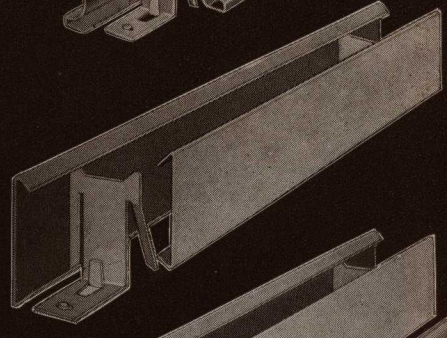


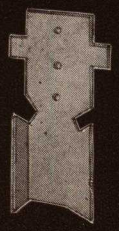
Furred Wall



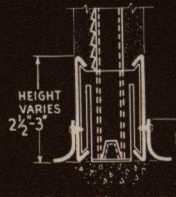
Masonry Wall

No. 666 Metal Base

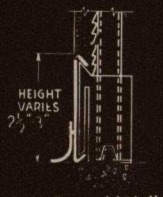




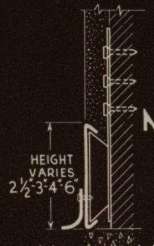
"M" Clip Masonry Type



Solid Plaster Partition

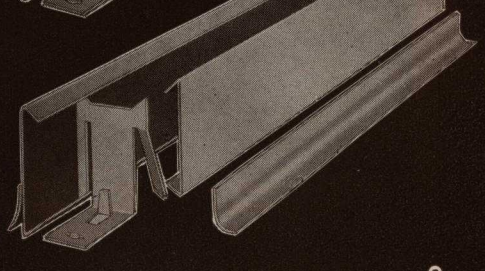


Furred Wall

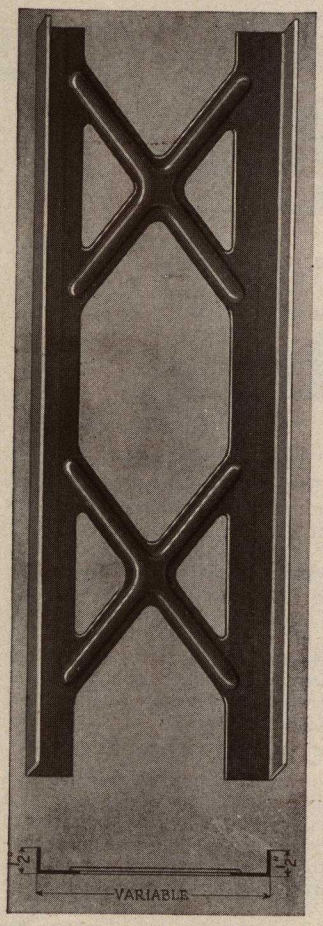


Masonry Wall

No. 668 Metal Base With Separate Cove



MILCOR STEEL STUD



Milcor Steel Studs have large uniform openings between the reinforced X-shape cross members.

ADVANCED ENGINEERING DESIGN OF THE EMBOSSED X-SHAPED MILCOR STEEL STUD OFFERS SIX IMPORTANT ADVANTAGES

FIRE-SAFETY—Milcor Hollow Partitions with Metal Lath are given a one- to two-hour fire rating, depending upon plaster used.

EARTHQUAKE RESISTANCE—Architects and Engineers agree that there is no other type of partition construction which will resist earthquakes, explosions, etc., as much as that made with Steel Studs and Metal Lath.

INSULATING VALUE—Because the partitions are hollow they have exceptional insulating value. If additional insulation is desired the application of any of the many insulating materials is easily made in the space between the walls.

SOUND RESISTANCE—Hollow Partitions are effective barriers to sound. Their sound insulating value compares favorably with clay or gypsum partitions which weigh a great deal more.

LIGHT WEIGHT—The use of the Steel Stud permits economical construction because of its light weight as compared with other types of partitions.

ELIMINATION OF PLASTER CRACKS—Steel Studs are not affected by moisture, cannot swell, warp or split. They are held firmly in place and eliminate the principal causes of plaster cracking when used in connection with Metal Lath.

ADAPTABILITY AND STRENGTH ASSURE SOUND CONSTRUCTION

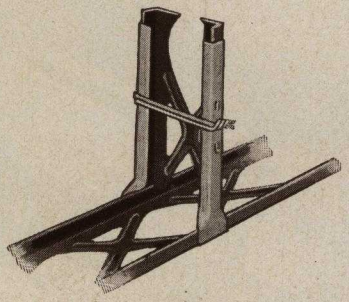
Milcor Steel Studs are very adaptable to framing for doors and other openings. To erect a door frame of unusual rigidity, Steel Stud members on either side of the opening are placed facing each other. Next a cross member is quickly and firmly attached with the special Milcor Shoe, completing the job. Wood framing may be nailed directly to the studs.

When used with Metal Lath and plaster, Milcor Steel Studs produce a partition strength equal to, or greater than, that of tile or gypsum block of equivalent thickness. Furthermore, they hold two advantages over masonry partitions; (1) Extraordinary resistance to explosions; (2) Provision for a positive tie to floor and ceiling.

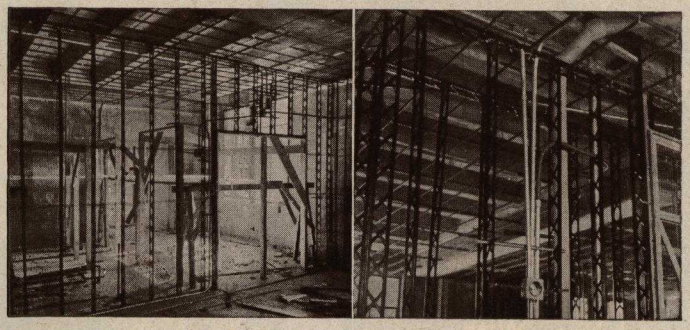
Milcor Steel Studs require a very small amount of storage space. They are easy to handle and not ordinarily subject to damage in transit. They combine strength with the advantage of much less bulk than wooden or other types. The large uniform perforations permit the passage of electrical, heating and water equipment without expensive cutting and fitting.

With the external type shoe (illustrated at left) a firm attachment of the stud can be made to floor or ceiling runners and also to studs in horizontal position. Shoes are furnished in 5- or 7-in. lengths. The 7-in. shoe is used for ceiling attachments when variations in ceiling height call for extra length.

EXTERNAL TYPE SHOES



Complete application of shoe—with stud attached to floor runner.

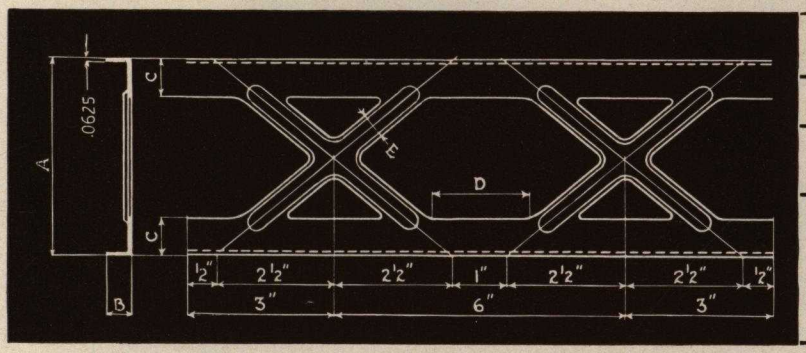


The use of Milcor Steel Studs greatly facilitates installation of electrical conduits and water pipes. These studs are readily adapted to framing for doors and other openings.

COST SAVING FEATURES OF MILCOR STEEL STUDS RIVAL ADVANTAGES OF SAFE STURDY CONSTRUCTION

Undeniable savings in erection are achieved because of:

1—Remarkably quick attachment with the MILCOR SHOE.
2—Variety of positions in which the same shoes and studs may be locked.
3—Elimination of confusion with materials—only one standard unit.
4—Large, uniform openings enable quick installation of pipes and conduits.
5—Exceptional strength requires less horizontal bridging.
6—Quickly cut to length on the job or pre-cut if desired.
7—Practically no cleaning up costs after installation.



PROPERTIES OF MILCOR STEEL STUDS				
All Dimensions in Inches				
A	B	C	D	E
3¼	½	¾	2¾	⅜
4	½	¾	2	½
6	½	¾	1½	½

SUGGESTED SPECIFICATIONS FOR MILCOR STEEL STUDS

PARTITIONS—To be made with MILCOR STEEL STUD, using ceiling and floor runner tracks, and Milcor shoes.

ERECTION STEPS—

1. Runner tracks to be aligned and securely attached to floor, ceiling or walls with concrete stub nails (or $\frac{3}{16}$-in. toggle bolts, in existing suspended ceilings). In new suspended ceilings runner track is to be wired to channels.

2. Erect MILCOR STUDS in accordance with recommended spacing as given in table below:

3. MILCOR SHOES to be used for attaching studs to floor and ceiling runners and cross members as required.

METAL LATH

To be MILCOR (see table for type and weight recommended for use with various stud spacings).

CONCRETE STUB NAILS—

¾-in. concrete stub nails are to be used for attaching floor and ceiling runners.

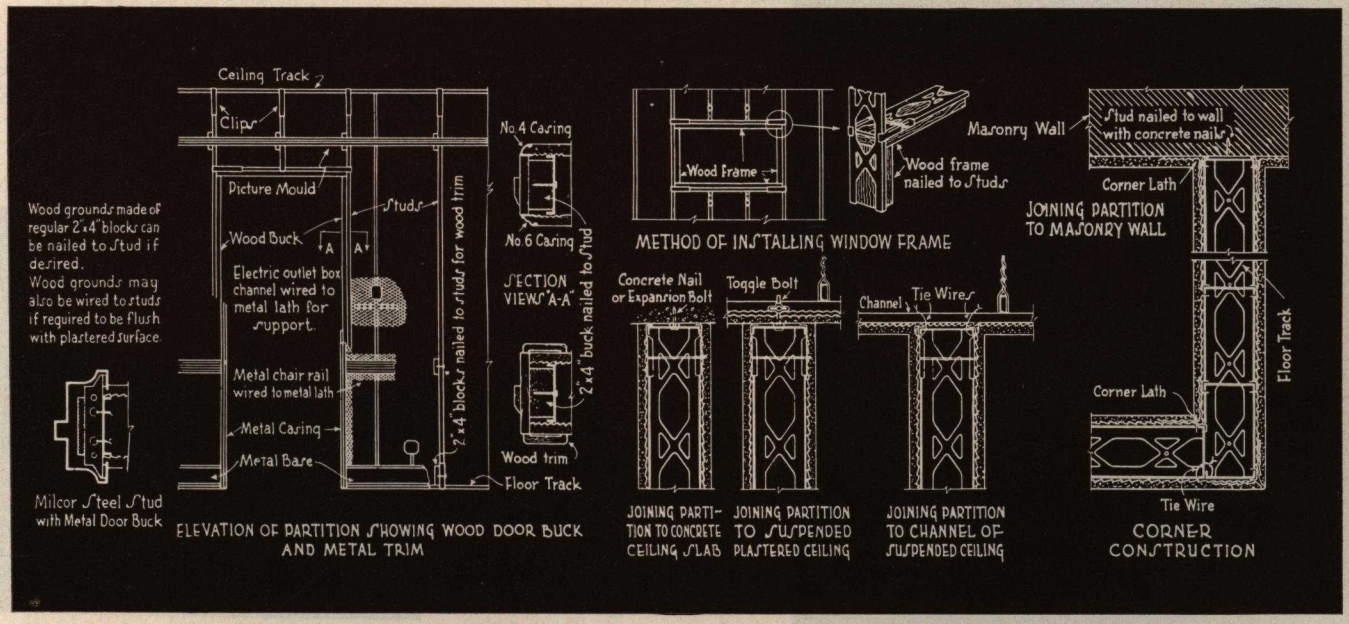
Type and Weight of Metal Lath	Recommended Spacing of Studs
2.5 lb. Smalmesh	12 in.
3.4 lb. Smalmesh	16 in.
2.75 lb. Milcor Specialmesh and No. 1 Stay-rib	16 in.
3.4 lb. Milcor Specialmesh and No. 1 Stay-rib	19 in.
3.4 lb. ⅜-in. Stay-rib No. 2	24 in.
4.0 lb. ⅜-in. Stay-rib No. 2	24 in.

STANDARD SIZES AND WEIGHTS

MILCOR STEEL STUDS are made of 16 gauge steel in three standard sizes: 3¼, 4 and 6 in. They are furnished in 6-, 7-, 8-, 9-, 10-, 12-, 14-, 16-, 18- and 20-ft. lengths. Special intermediate lengths can be furnished which are charged for at the price of the next standard length.

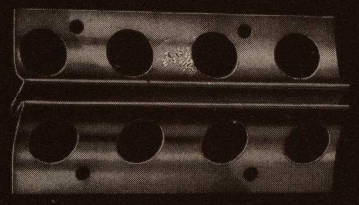
WEIGHTS—POUNDS PER 1000 FEET

3¼-in. size.....720 lbs.
4 -in. size.....700 lbs.
6 -in. size.....880 lbs.


Ceiling Track
Clip
Picture Mould
Studs
Wood Buck
A
A
Electric outlet box channel wired to metal lath for support.
Metal chair rail wired to metal lath
Metal Casing
Metal Base
2"x4" blocks nailed to studs for wood trim
Floor Track
Wood grounds made of regular 2"x4" blocks can be nailed to stud if desired.
Wood grounds may also be wired to studs if required to be flush with plastered surface.
Milcor Steel Stud with Metal Door Buck
No.4 Casing
No.6 Casing
SECTION VIEWS "A-A"
2"x4" buck nailed to stud
Wood trim
Floor Track
ELEVATION OF PARTITION SHOWING WOOD DOOR BUCK AND METAL TRIM
Wood Frame
Masonry Wall
Wood frame nailed to studs
METHOD OF INSTALLING WINDOW FRAME
Concrete Nail or Expansion Bolt
Toggle Bolt
Channel
Tie Wire
JOINING PARTITION TO CONCRETE CEILING SLAB
JOINING PARTITION TO SUSPENDED PLASTERED CEILING
JOINING PARTITION TO CHANNEL OF SUSPENDED CEILING
Stud nailed to wall with concrete nails
Corner Lath
JOINING PARTITION TO MASONRY WALL
Floor Track
Corner Lath
Tie Wire
CORNER CONSTRUCTION

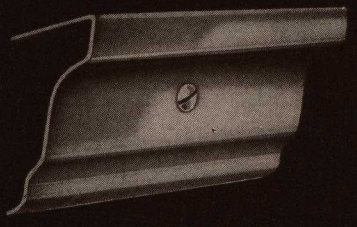
MILCOR STEEL STUDS are adaptable to every type of fireproof construction. Expansion corner beads, picture mould, chair rails, metal or wood casing, metal door bucks, wood or metal window frames, wood or metal base, cove lath and other equipment are applied in the regular manner.

No. 70

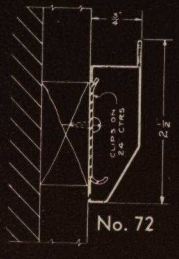


No. 70 Concealed Picture Mould

No. 71



No. 71 Ornamental Picture Mould



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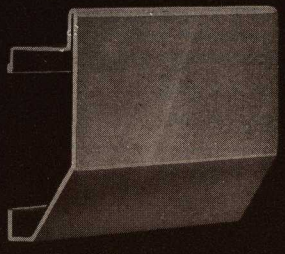
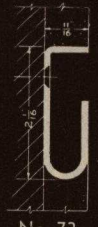
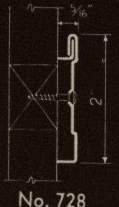


No. 72 Picture Mould



No. 73

No. 73 Picture Mould



No. 728

No. 728 Picture Mould

MILCOR PICTURE MOULDS

NO. 70 CONCEALED PICTURE MOULD

MATERIAL—No. 26 gauge sheet steel, galvanized. LENGTH—10 ft. APPROXIMATE SHIPPING WEIGHT—260 lbs. per 1,000 ft.

NO. 71 PICTURE MOULD

MATERIAL—No. 20 gauge and No. 18 gauge sheet steel, galvanized. LENGTH—10 ft. APPROXIMATE SHIPPING WEIGHT—No. 20 gauge—420 lbs. per 1,000 ft. No. 18 gauge—550 lbs. per 1,000 ft.

NO. 72 PICTURE MOULD

MATERIAL—No. 20 gauge sheet steel, galvanized. LENGTH—10 ft. APPROXIMATE SHIPPING WEIGHT—680 lbs. per 1,000 ft.

NO. 73 PICTURE MOULD

MATERIAL—Nos. 16, 14 and 12 gauge sheet steel, galvanized. LENGTH—10 ft. APPROXIMATE SHIPPING WEIGHT—No. 16 gauge—1,030 lbs. per 1,000 ft. No. 14 gauge—1,270 lbs. per 1,000 ft. No. 12 gauge—1,760 lbs. per 1,000 ft.

NO. 728 PICTURE MOULD

MATERIAL—No. 20 gauge steel, black. LENGTH—10 ft. APPROXIMATE SHIPPING WEIGHT—420 lbs. per 1,000 ft.

Packed in Crates or Cartons.

MILCOR BASE SCREEDS

NO. 3 EXPANSION BASE SCREED

GENERAL CHARACTERISTICS—A firm, rigid metal dividing strip set between plaster and flush cement base with the advantage of 2¾-inch wings of strong mesh lath which reinforces against the possibility of cracks at juncture.

MATERIALS, WEIGHTS, ETC.—Sheet steel, galvanized. 26 gauge. Shipping weight approximately 230 lbs. per 1,000 lin. ft., 10 ft. long. Packed 500 lin. ft. per crate or carton.

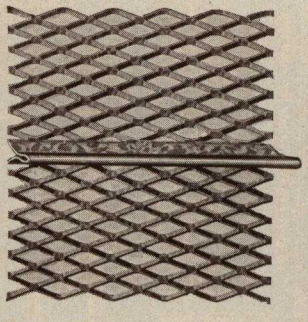
NOTE: For complete description of materials, finishes, etc., see page 2.

NO. 74 CURVED POINT BASE SCREED

MATERIAL—No. 26 gauge sheet steel, galvanized. LENGTH—10 ft. APPROXIMATE SHIPPING WEIGHT—200 lbs. per 1,000 ft. Cast iron fittings can be furnished with this screed. Packed 1,000 lin. ft. per crate or carton.

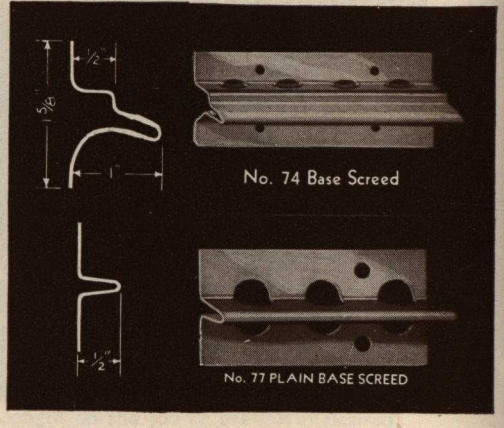
NO. 77 PLAIN BASE SCREED

MATERIAL—No. 26 gauge sheet steel, galvanized. LENGTH—10 ft. Stocked in ½-in. grounds. APPROXIMATE SHIPPING WEIGHT—160 lbs. per 1,000 ft. Packed 1,000 lin. ft. per crate or carton.

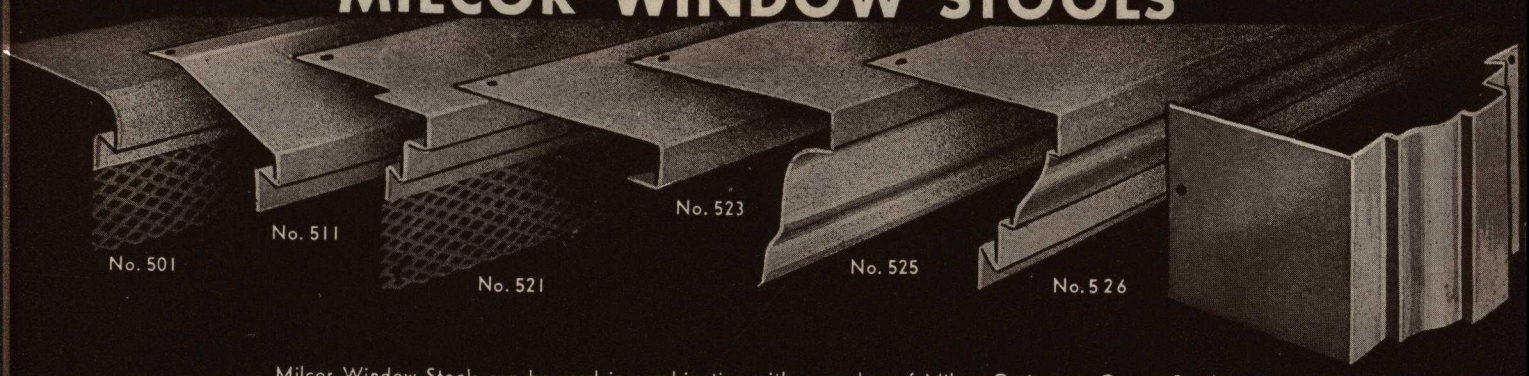


NO. 3 EXPANSION BASE SCREED

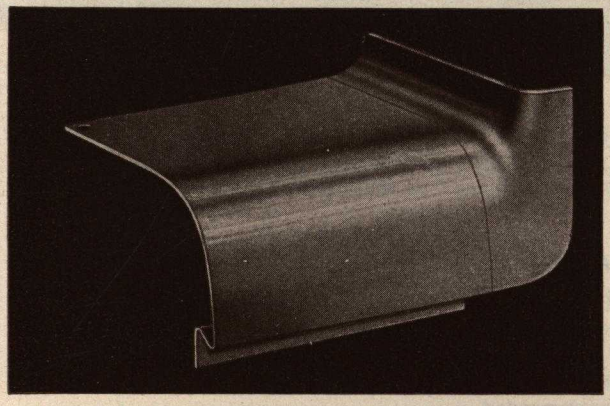
The network of the expanded metal wings assures keying of the plaster close up to the base of the exposed metal member.



MILCOR WINDOW STOOLS



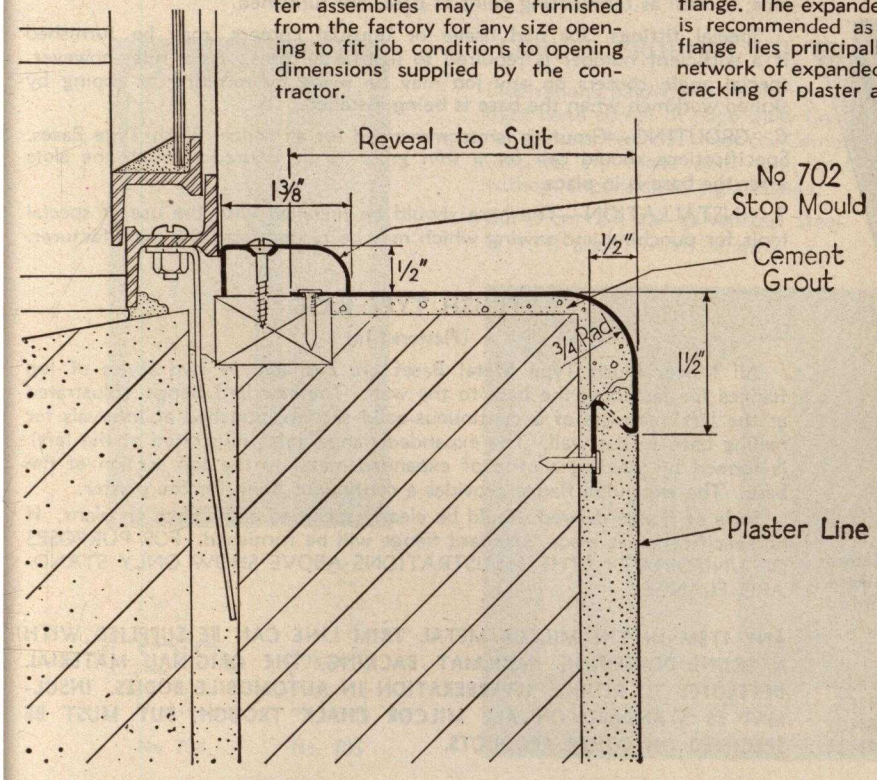
Milcor Window Stools can be used in combination with a number of Milcor Casings or Corner Beads. Made in 20, 18, 16, 14, and 12 gauge metal, they are prime coated at the factory and will take any painting or decorating finish. Exact dimensions should be supplied wherever possible so that preparatory fabrication may be done in the factory.



MILCOR NO. 501 WINDOW STOOL, WITH STANDARD FLANGE AND STAMPED CORNER FITTING FOR ¾-INCH BULL NOSE BEAD

Milcor square, projecting or radius stools may be used in conjunction with plastered jambs with either small nose or bull nose bead, or with radius jamb and head sections. Stools, jambs and heads may be connected with corner fittings welded and fitted in the factory.

Complete frames or three-quarter assemblies may be furnished from the factory for any size opening to fit job conditions to opening dimensions supplied by the contractor.



Milcor Metal Window Trim is an all-inclusive term which covers either the completely mitered, welded and assembled, ready-to-install frame, or the individual units, or combination of sections, which form any part of the inside window opening.

Many individual items, which can be used separately or in combination with other sections to provide any desired interior architectural effect, are available including flush-with-plaster or projecting types. Radius trims may also be furnished with either ¾ or 1½-in. radii.

GENERAL SPECIFICATION DATA

1. IDENTIFICATION OF TRIM—Window trim and/or stools should be selected and specified by numbers given herein.
2. KIND OF METAL AND GAUGE—Trim and/or stools are made from tight coat galvanized sheets of 20, 18, 16, 14 and 12 gauge metal.
3. FITTINGS—Corner Fittings of grey cast iron, may be supplied for all radius fittings and may be fitted and welded to trim in the factory. Stamped steel fittings for certain connections are also available.
4. FINISH—Milcor Window Trim and Stools are given a priming coat at the factory, and take any type of painting or decorating finish. Finishing coat should be applied after trim is installed and the plastering is completed.
5. GROUTING—Grouting is recommended for all Milcor Window Stools. Specifications should call for a thick grout upon which stools are set.
6. MEASUREMENTS—Exact dimensions should be supplied the manufacturer by the contractor whenever possible so that most of the work in preparing the trim for installation may be done at the factory.

MILCOR WINDOW TRIM AVAILABLE IN EITHER STANDARD OR EXPANDED FLANGE

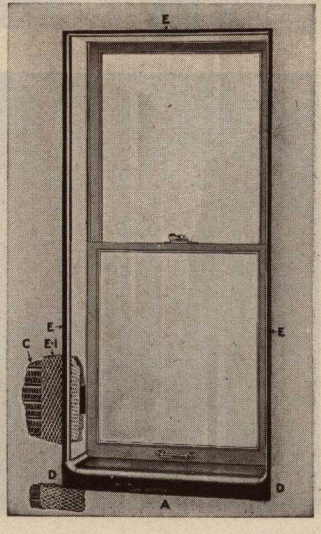
Milcor Window Trim is furnished in either standard or expanded plaster flange. The expanded metal flange, which is welded to the standard flange, is recommended as the most practical. The advantage of this expanded flange lies principally in its function as a permanent plaster bond whose network of expanded steel reinforces the plaster and prevents checking and cracking of plaster at the vulnerable points.

Style of flange desired should be clearly specified and shown on plans. If not specified, standard flange will be furnished. FOR PURPOSES OF UNIFORMITY, ILLUSTRATIONS AND DETAILS SHOW ONLY STANDARD FLANGE.

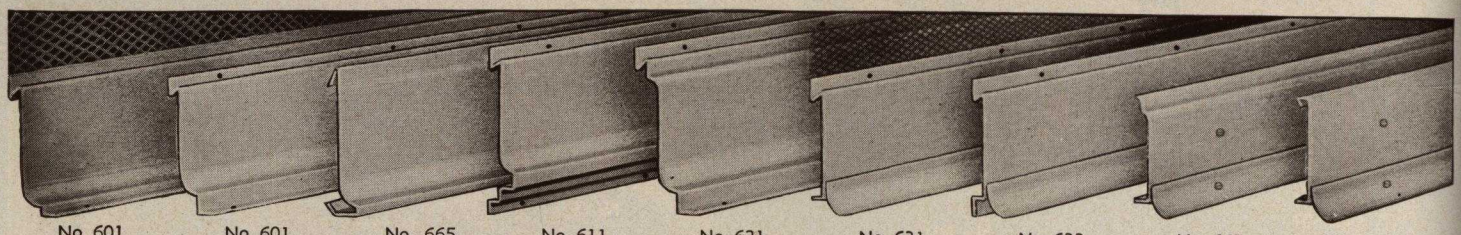
(Shown at Right)

"A"—No. 501 Curved Stool, "D"—Nos. 500-G and 500-H, Left and Right End Fittings, respectively, "E"—¾ in. Nose of Bull Nose Expansion Corner Bead No. 10, "E-1"—Expanded Metal Wings of Bead; "C" Milcor Specialmesh Metal Lath in wall.

It is important that specifications be given regarding gauges of metal. We recommend 18 gauge where the reveal is not wider than 4 in. and the stool is 5 ft. or less.



MILCOR METAL BASES

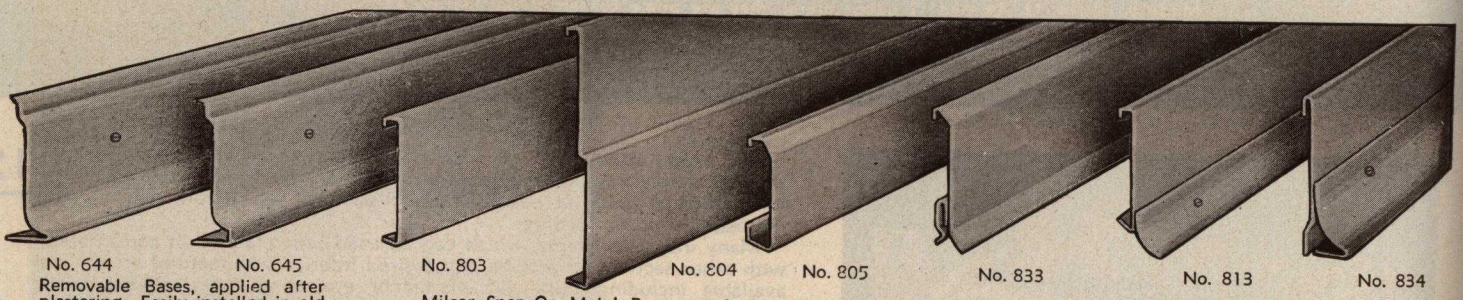


No. 601 No. 601 No. 665 No. 611 No. 621 No. 631 No. 633 No. 643 No. 648

These Milcor Metal Bases, applied before plastering, are available with either Expanded, Metal Flange, or Standard Continuous Flange, 18 or 20 gauge, in heights of either 4 in. or 6 in. Flange has perforations through which a thin cement grout may be poured.

Adjustable bases, especially suitable for wood or linoleum floors. Flush type, with adjustable Cove Mould.

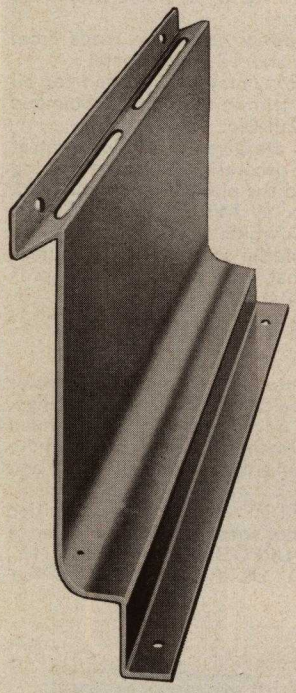
Adjustable Offset Bases, especially designed for use where shrinkage or settling may be excessive. Applied after plastering.

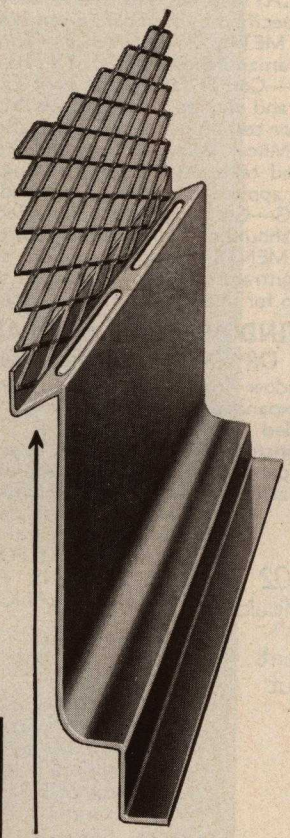


No. 644 No. 645 No. 803 No. 804 No. 805 No. 833 No. 813 No. 834

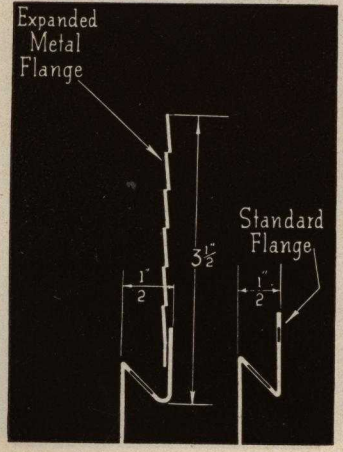
Removable Bases, applied after plastering. Easily installed in old buildings. No. 645 may also be used as a Casing.

Milcor Snap-On Metal Bases, made in six types to snap on over pre-applied clips and eliminate exposed screw-heads. No. 813 can be used with interchangeable Cove Moulds.





NOTE PERFORATIONS TO PERMIT ENTRY OF GROUT



Metal Base No. 601 Shown above with Standard Flange and Expanded Metal Flange

MILCOR BASES AVAILABLE EITHER WITH EXPANDED METAL FLANGE OR STANDARD FLANGE

GENERAL SPECIFICATION DATA FOR ALL BASES

Milcor Metal Base is available in many practical designs, sizes and weights. There are two general classifications of metal base: 1) flush or plastered-in type; 2) applied or removable type.

1. PLAN SHOWING LOCATION—A plan showing just where metal base is to be used is recommended.

2. IDENTIFICATION OF BASE—Base should be selected and specified by number as given in this catalog.

3. KIND OF METAL AND GAUGE—Milcor bases are made from tight coat galvanized sheets of 18 and 20 gauge metal.

4. FINISH—Milcor bases are given a protective priming coat at the factory and will take any subsequent type of painting or decorating finish. Finish coat should be applied after base is in place and the plastering is completed.

5. FITTINGS—Milcor corner fittings for right angles, both inside or outside, as well as terminating point of base, are furnished.

Special fittings, for odd usage or unusual corners, may be furnished if a sufficient number is required to justify patterns. As a rule, however, special angle corners on any job may be made by mitering or coping by skilled workmen when the base is being installed.

6. GROUTING—Grouting is recommended for all Milcor Flush-Type Bases. Specifications should call for a thin grout to be poured through the slots after the base is in place.

7. INSTALLATION—The base should be installed with the use of special tools for punching and sawing which may be rented from the manufacturer.

FLUSH TYPE BASE

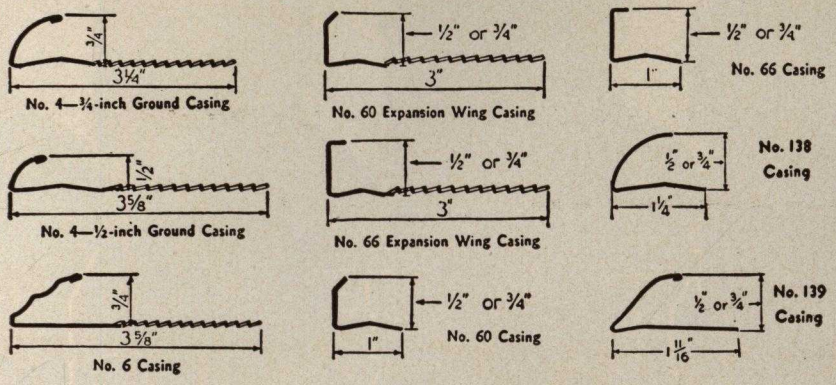
(Plastered-In)

All Milcor Flush Type Metal Bases are available in two styles of top flanges for fastening the base to the wall. The standard flange (illustrated at the left) consists of a continuous solid section, punched at intervals for nailing base to the wall. The expanded flange (also illustrated at the left) is formed by welding a strip of expanded metal to the top section of the base. The expanded flange provides a continuous bond for the plaster.

Style of flange desired should be clearly specified and shown on plans. If no specification is made, standard flange will be furnished. FOR PURPOSES OF UNIFORMITY, THE ILLUSTRATIONS ABOVE SHOW ONLY STANDARD FLANGE.

ANY ITEM IN THE MILCOR METAL TRIM LINE CAN BE SUPPLIED WITH A SOUND-DEADENING INSULMAT BACKING, THE ORIGINAL MATERIAL DEVELOPED TO REDUCE REVERBERATION IN AUTOMOBILE BODIES. INSULMAT IS STANDARD ON ALL MILCOR CHALK TROUGH, BUT MUST BE SPECIFIED ON OTHER PRODUCTS.

MILCOR CASINGS, SPECIAL MOULDS AND CORNER GROUNDS



Milcor Expansion Door and Window Casings add a pleasing note of simplicity quite in line with modern trends. The lasting beauty and the practical, durable and fire-safe advantages of these materials have for years made them the first choice of many architects and contractors.

SPECIFICATION DATA

DESIGNS—No. 4-Quarter Round, No. 6-O.G., No. 60-Square, No. 66-Square, No. 138-Quarter Round and No. 139-O.G. (Shown in the cross sections above.)

FLANGES—Casings Nos. 4, 6, 60 and 66 have the expansion flange as an integral part of the casing. Casings Nos. 60 and 66 also made short flange. The Nos. 138 and 139 are made short flange only.

MATERIALS—Tight coat galvanized steel. Nos. 60 and 66 short flange cut from 22 gauge sheets. Nos. 138 and 139 short flange, also all expansion flange casings cut from 24-gauge sheets.

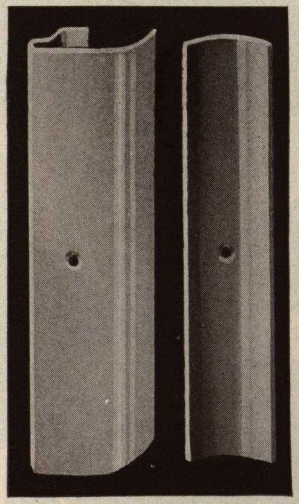
LENGTHS AND GROUNDS—Made in 7, 8 and 10-foot lengths. No. 6-O.G. made for ¾-inch grounds only. All other styles made for ½ and ¾-inch grounds.

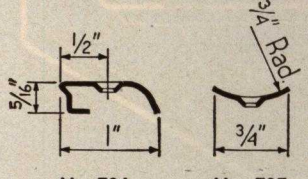
NOS. 704 AND 705 MOULDS FOR CASINGS, STOOLS, ETC.

No. 704 Mould for Casings and Window Trim 24 Gauge Galvanized Steel, gray primed, 1 inch wide—No. 5, ¾-inch Oval Head Wood Screws furnished.

No. 705 Casings Mould, 20 Gauge Galvanized Steel, gray primed, ¾-inch radius—No. 5, ¾-inch Oval Head Wood Screws furnished.

Screw Holes Spaced 11½ inches on Centers in All Moulds. Standard Lengths: 7, 8 and 10 feet.



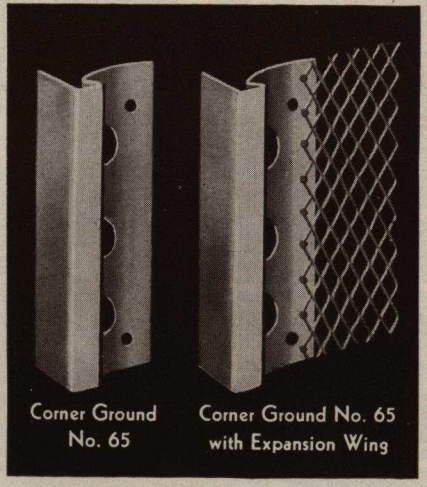


No. 704 No. 705

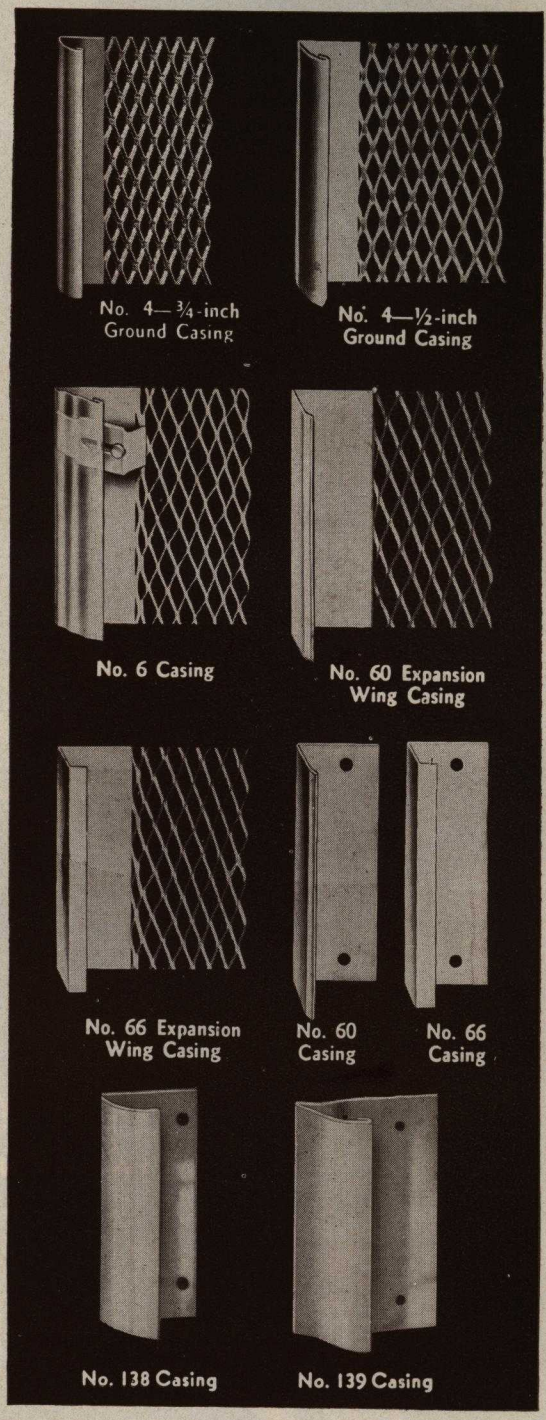
CORNER GROUNDS NO. 65

Illustrations below and in the lower right hand corner of page show Corner Ground No. 65. No. 65 Corner Grounds are made both with and without Expansion Wing attached.

Cut from 24 ga. galvanized steel, in 7, 8 and 10-foot lengths.



Corner Ground No. 65 | Corner Ground No. 65 with Expansion Wing

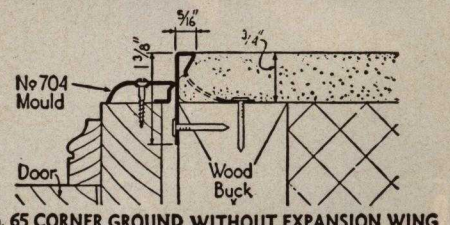


No. 4—¾-inch Ground Casing | No. 4—½-inch Ground Casing

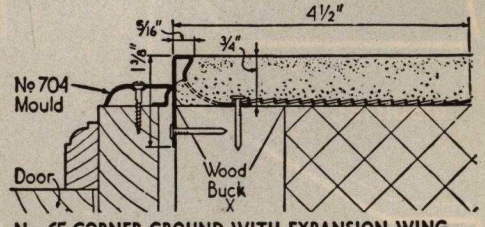
No. 6 Casing | No. 60 Expansion Wing Casing

No. 66 Expansion Wing Casing | No. 60 Casing | No. 66 Casing

No. 138 Casing | No. 139 Casing

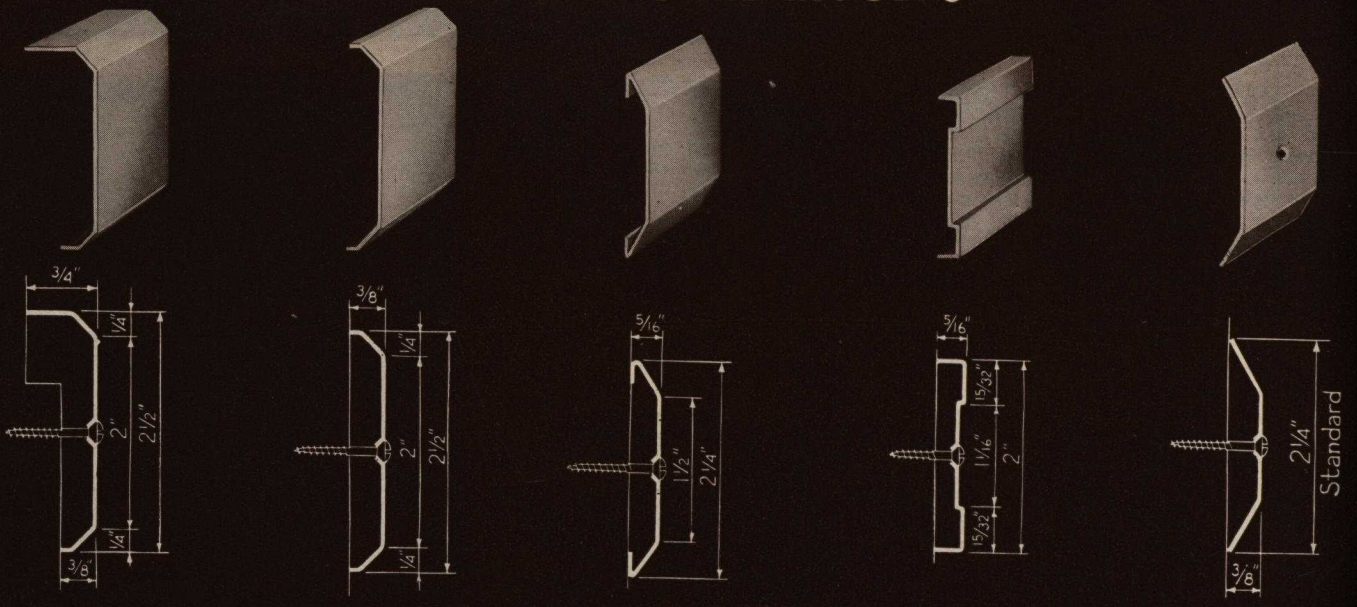


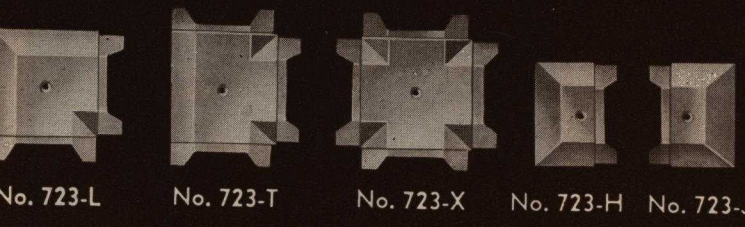
No. 65 CORNER GROUND WITHOUT EXPANSION WING



No. 65 CORNER GROUND WITH EXPANSION WING

MILCOR BLACKBOARD MOULDS



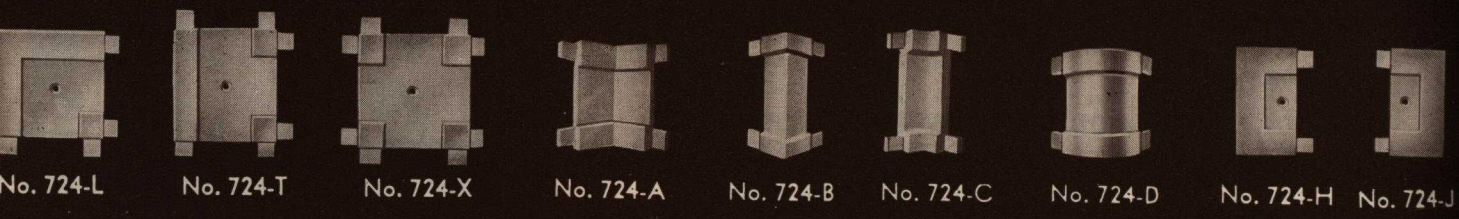


FITTINGS FOR No. 723 BLACKBOARD MOULD

No. 723-L Corner Fitting.
No. 723-T "T" Fitting
No. 723-X Cross Fitting.
No. 723-H Right End Stop.
No. 723-J Left End Stop.

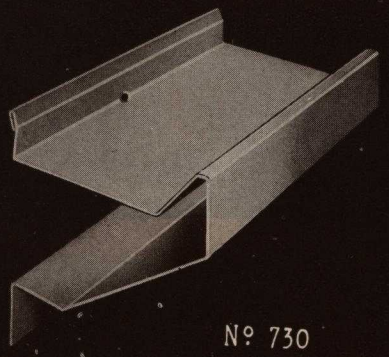
FITTINGS FOR No. 724 BLACKBOARD MOULD

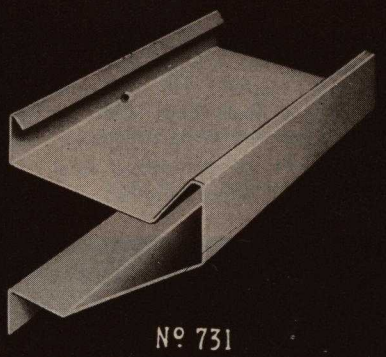
No. 724-L Corner Fitting.
No. 724-T "T" Fitting.
No. 724-X Cross Fitting.
No. 724-H Right End Stop.
No. 724-J Left End Stop.
No. 724-A Inside Corner, Square.
No. 724-B Outside Corner, Square.
No. 724-C Inside Corner, ¾ Round.
No. 724-D Outside Corner, ¾ Round.

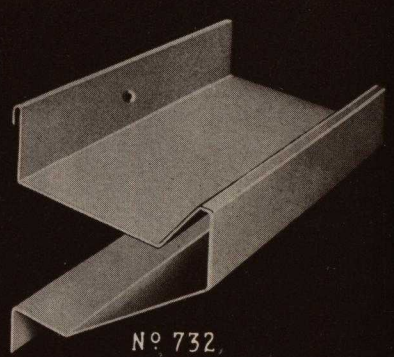


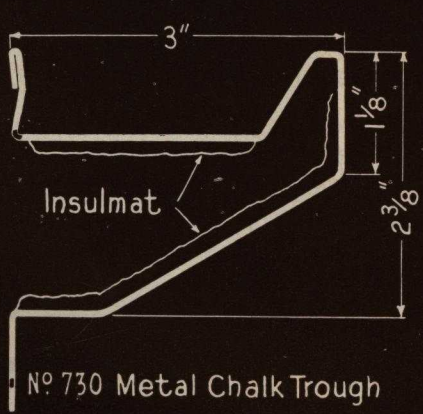
MILCOR CHALK TROUGHS

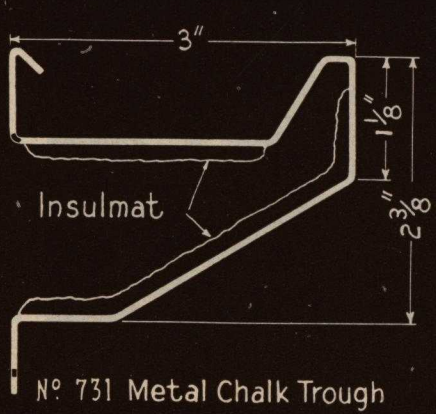
(WITH INSULMAT SOUND DEADENING)

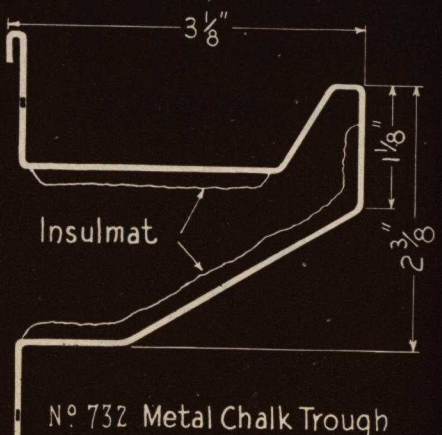


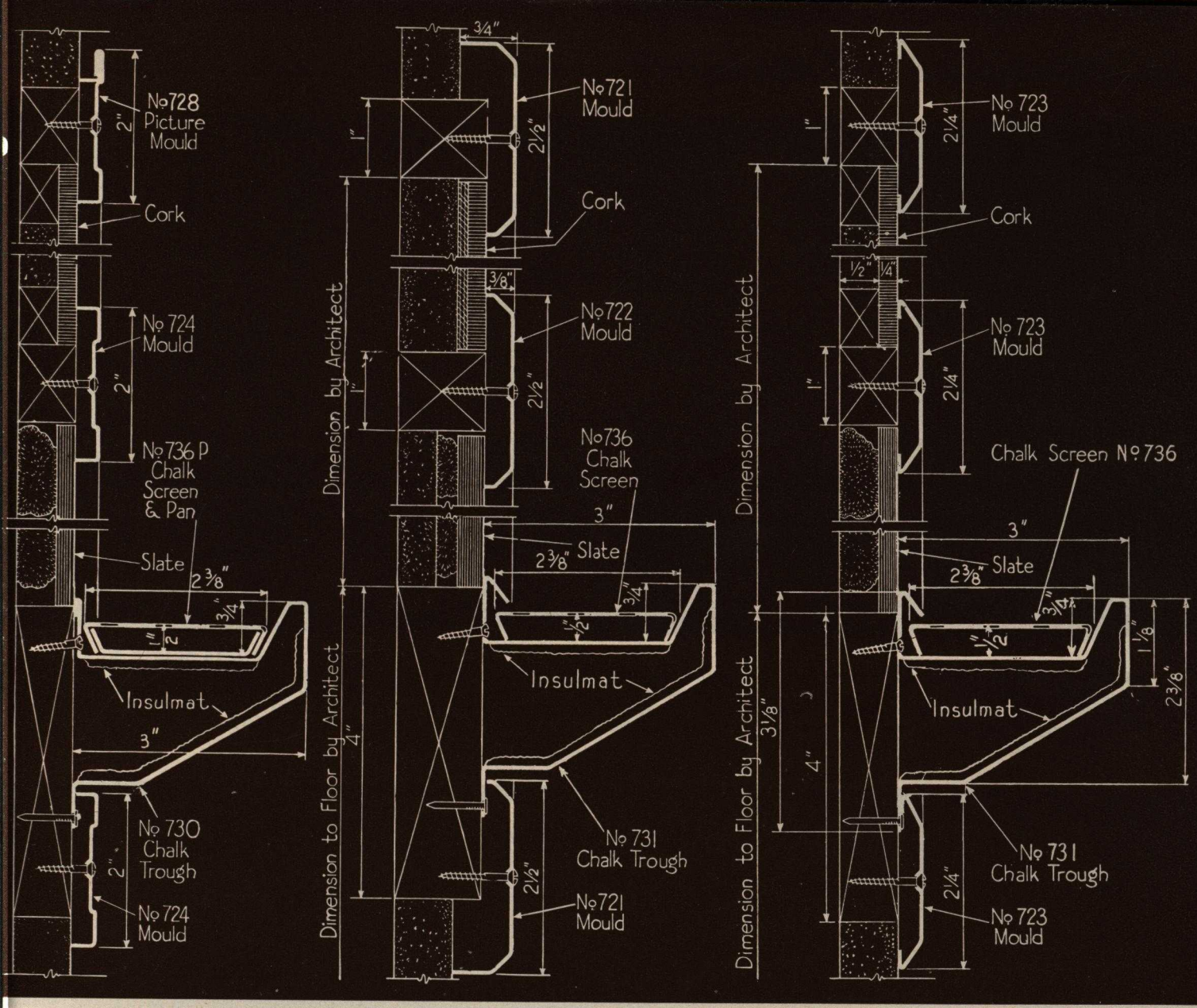












MILCOR BLACKBOARD MOULDS, CHALK TROUGHS AND INSERTS

BLACKBOARD MOULDS

Nos. 721, 722, 723, 724 and 725

(See opposite page)

Almost any blackboard design can be made with these moulds and the fittings which accompany them.

Nos. 721, 722 and 725 Moulds are mitred on the job. All blackboard moulds made from 20-gauge steel, gray primed, and furnished in standard 10 foot lengths.

CHALK TROUGHS

Nos. 730, 731 and 732

(See opposite page)

All troughs identical in size and contour, and differ only in the top edge detail which is designed to accommodate various assemblies of blackboard, and inserts. (See above.)

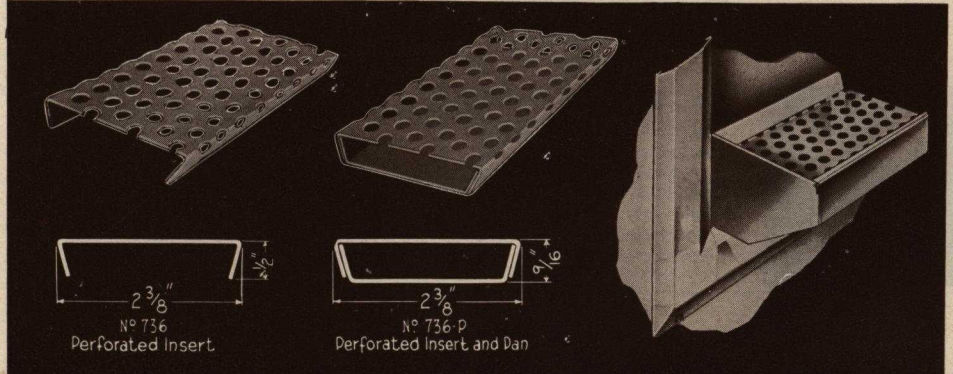
Made from 22-gauge galvanized steel, gray primed; furnished with Insulmat sound deadening.

CHALK TROUGH INSERTS

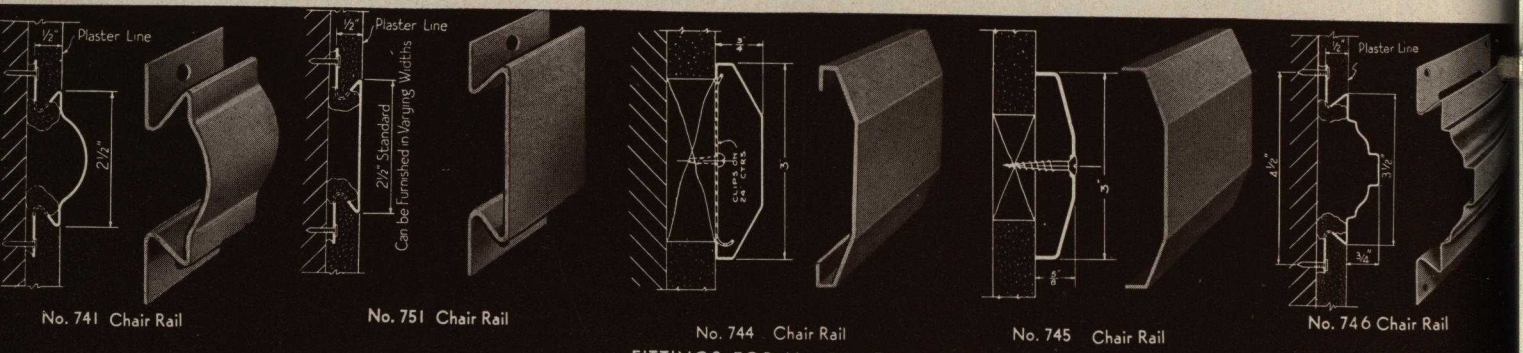
Nos. 736 and 736-P

(Illustrated below)

The perforated insert, together with pan, may be used with any of the above types of chalk troughs. Inserts and pans furnished in 3, 4 and 5 foot lengths. Note side illustrations showing assemblies including left end closure No. 732-J.



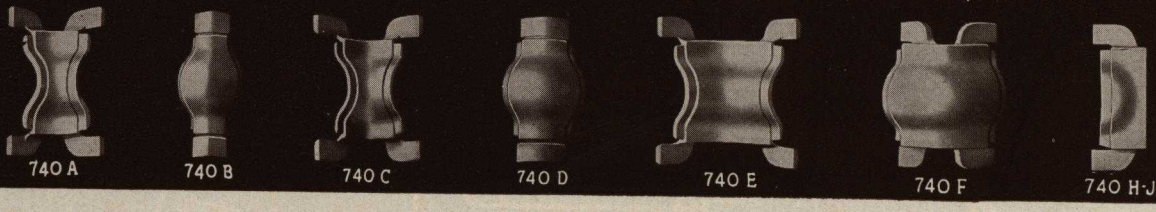
MILCOR CHAIR RAILS



No. 741 Chair Rail | No. 751 Chair Rail | No. 744 Chair Rail | No. 745 Chair Rail | No. 746 Chair Rail

FITTINGS FOR No. 741 CHAIR RAIL

No. 740-A Square. Inside cast iron corner.
No. 740-B Square. Outside cast iron corner.
No. 740-C ¾" radius. Inside cast iron corner.
No. 740-D ¾" radius. Outside cast iron corner.
No. 740-E 1½" radius. Inside cast iron corner.
No. 740-F 1½" radius. Outside cast iron corner.
No. 740-H Right End. End stop, cast iron.
No. 740-J Left End. End stop, cast iron.



740 A | 740 B | 740 C | 740 D | 740 E | 740 F | 740 H-J

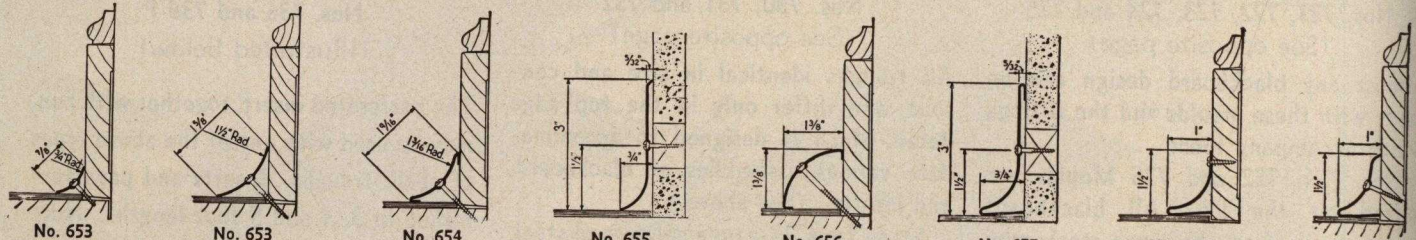
MILCOR CHAIR RAILS—Metal Chair Rails keep furniture from disfiguring the plastered walls and also form the top of a wainscot. They are desirable in schools and public buildings of all kinds. Made from 20 Gauge Steel, gray primed, and furnished in 10 foot lengths.

Necessary oval head wood screws are furnished for applied chair rails. Cast fittings for No. 741 Chair Rail are shown. No fittings are furnished for other designs of chair rails which are either mitred on the job or mitred and welded at the factory.

MILCOR COVE MOULDS

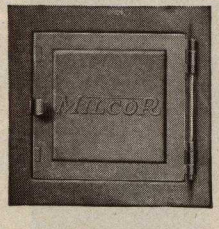
No. 653 | No. 654 | No. 655 | No. 656 | No. 657 | No. 658 | No. 659

Milcor Cove Moulds come in seven types and have many practical purposes, particularly with wood, linoleum, or carpeted floors. All of them are removable and are easily installed. Cast Fittings available for No. 654 and No. 655 Cove Moulds.



No. 653 ¾-in. Radius Cove Mould | No. 653 1½-in. Radius Cove Mould | No. 654 Cove Mould | No. 655 Cove Mould | No. 656 Cove Mould | No. 657 Cove Mould | No. 658 Cove Mould | No. 659 Cove Mould

Milcor Clean-Out Door



Stamped from highest grade, heavy copper alloy steel sheets. Hinges are integral with frame and door. Furnished painted.

Sizes	Shipping Wt. per Carton of 6
8 x 8 in.	20 lbs.
8 x 10 in.	25 lbs.
10 x 12 in.	30 lbs.

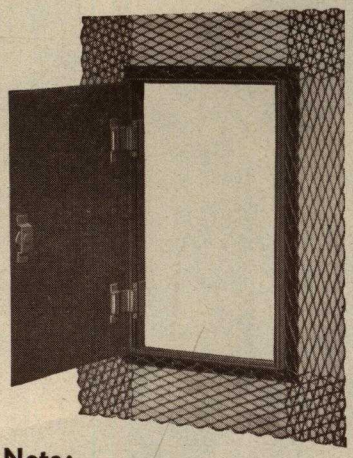
MILCOR METAL ACCESS DOORS

STYLE K—With Expansion Wings for use with Plastered Walls.
STYLE L—Without Expansion Wings for use with Plastered Walls.
STYLE M—For Non-Plastered Walls.

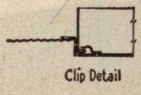
Doors—All doors to be 14 Gauge Steel.
Frames—Frames formed from 16 Gauge Steel.
Paint—All panels furnished with one prime coat of aluminum paint.
Cam Lock—Is standard locking device. A flush-with-door screw head is a feature of the standard cam lock. Cylinder lock with master key can be furnished, if required at slight extra cost. Be sure to specify the cylinder lock if it is desired.

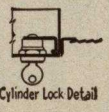
STYLE K

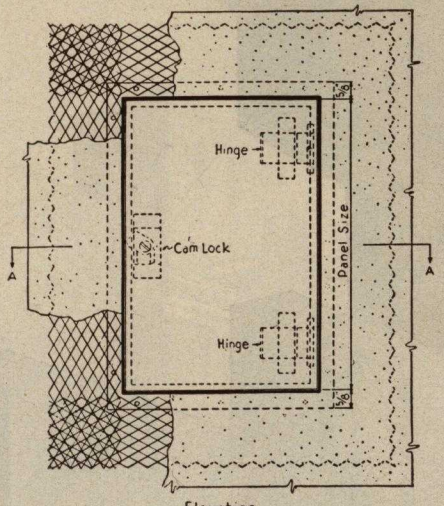
With Expansion Wing.



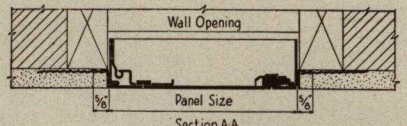
Note:
Double Reinforcement of Expanded Metal at Corners, Where Plaster Cracks Often Develop.


Clip Detail

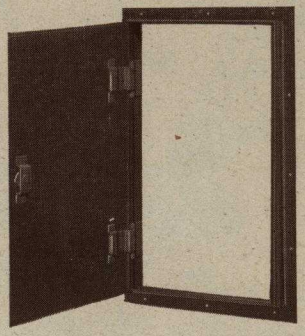

Cylinder Lock Detail



Elevation

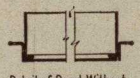


Section A-A



STYLE L

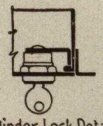
Without Expansion Wings.

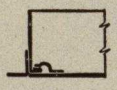

Detail of Panel Without Expanded Metal Wing

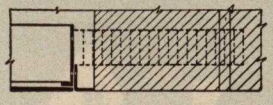
FOR MASONRY CONSTRUCTION

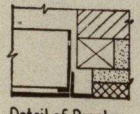
STYLE M

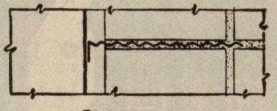
Corrugated anchors are furnished, when required, to facilitate installation of Milcor Access Panels in walls of brick or tile. These anchors may be easily bent or cut to accommodate job conditions.

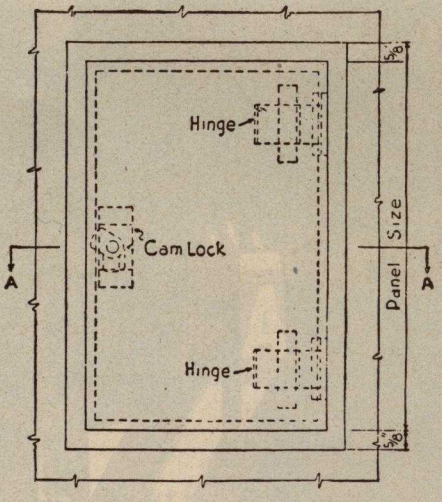

Cylinder Lock Detail


Clip Detail

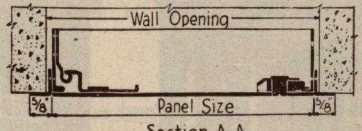

Section


Detail of Panel in Bathroom Tile Wall


Elevation
Corrugated Anchor Detail and Detail of Panel in Brick, stone or Structural Facing Tile



Elevation



Section A-A

STYLES AND DIMENSIONS

Catalog No.	Wall Opening (inches)	Style "K" Weight (lbs.)	Style "L" or "M" Weight (lbs.)	Catalog No.	Wall Opening (inches)	Style "K" Weight (lbs.)	Style "L" or "M" Weight (lbs.)
8- 8	8 3/8 x 8 3/8	3 1/2	3	20-24	20 3/8 x 24 3/8	18	16 1/2
8-12	8 3/8 x 12 3/8	5	4	20-30	20 3/8 x 30 3/8	24	22
12-12	12 3/8 x 12 3/8	6 1/2	5 1/2	24-24	24 3/8 x 24 3/8	22	20
12-16	12 3/8 x 16 3/8	10 1/2	9	24-30	24 3/8 x 30 3/8	31	28
16-16	16 3/8 x 16 3/8	12	10 1/2	24-36	24 3/8 x 36 3/8	37	34
16-20	16 3/8 x 20 3/8	13	11 1/2				

If hinged type is desired, add the letter "H" to the style number (style K H). If removable type is desired add the letter "R" to style number. Access Doors furnished with or without hinges at same price. Hinged type always furnished unless removable type specified.

MILCOR MANUAL

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